How Was Coastal Louisiana Formed? And Who Lives In the Wetlands?

By

Donald W. Davis

Economic and Environmental Analysis Conference, 2002

July 16-18, 2002

New Orleans, Louisiana

South Louisiana's geographic complex is a product of two distinct ingredients: one natural and the other cultural, or

ALLUVIAL

Empire

THE MISSISSIPPI DRAINS 31 STATES AND TWO CANADIAN PROVIDES THROUGH 54 TRIBUTARIE S

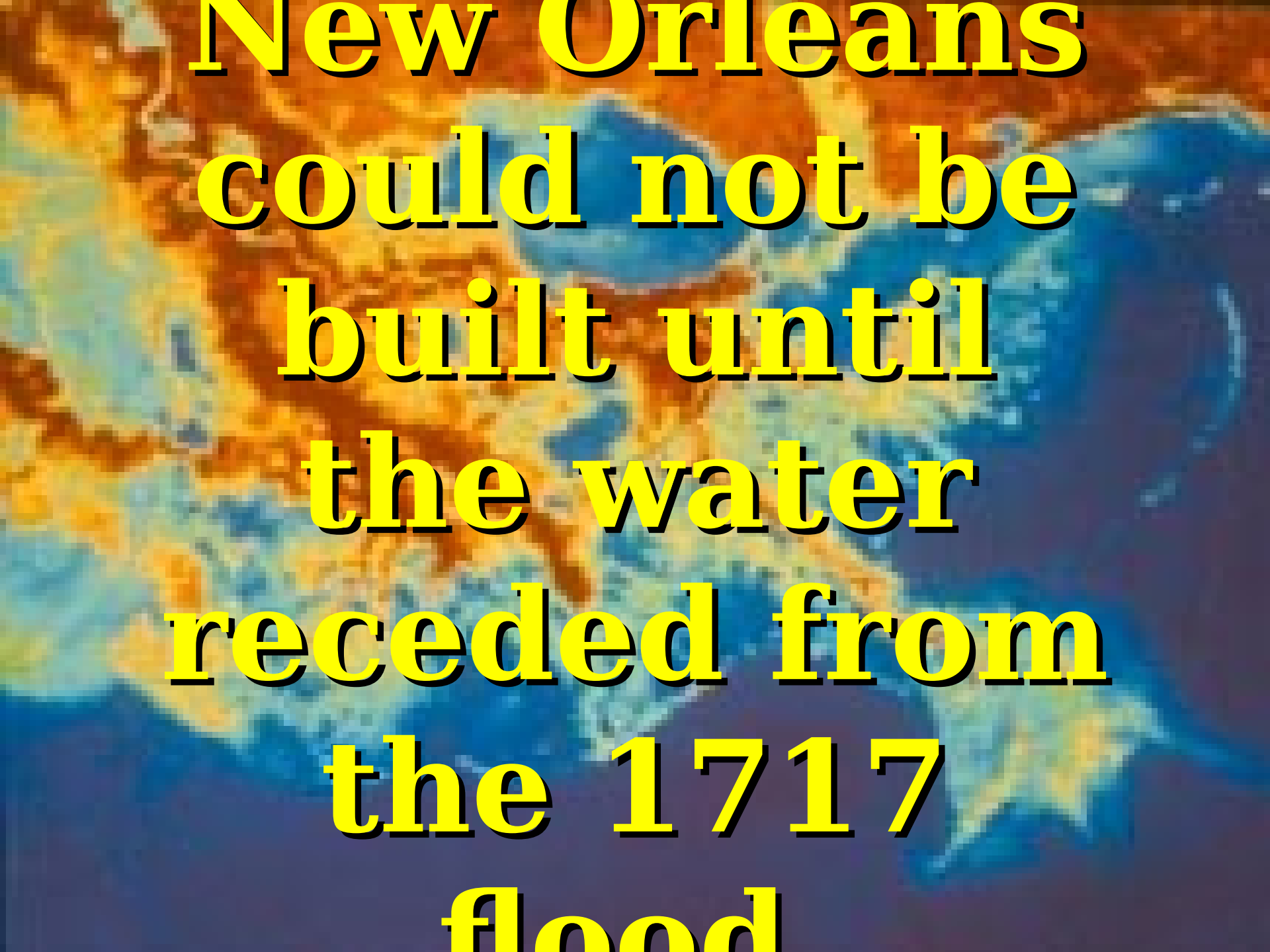
CHENIER PLAIN OF SOUTHWESTERN LOUISIANA
HOLOCENE
Marsh
Chenier Ridge
Prograding Mud Flats
PLEISTOCENE
Prairie Terrace
1500 kybp Significant Date
2500
1100
20
Miles
Kinsey and McFarlan, 1959

TOPONYMS

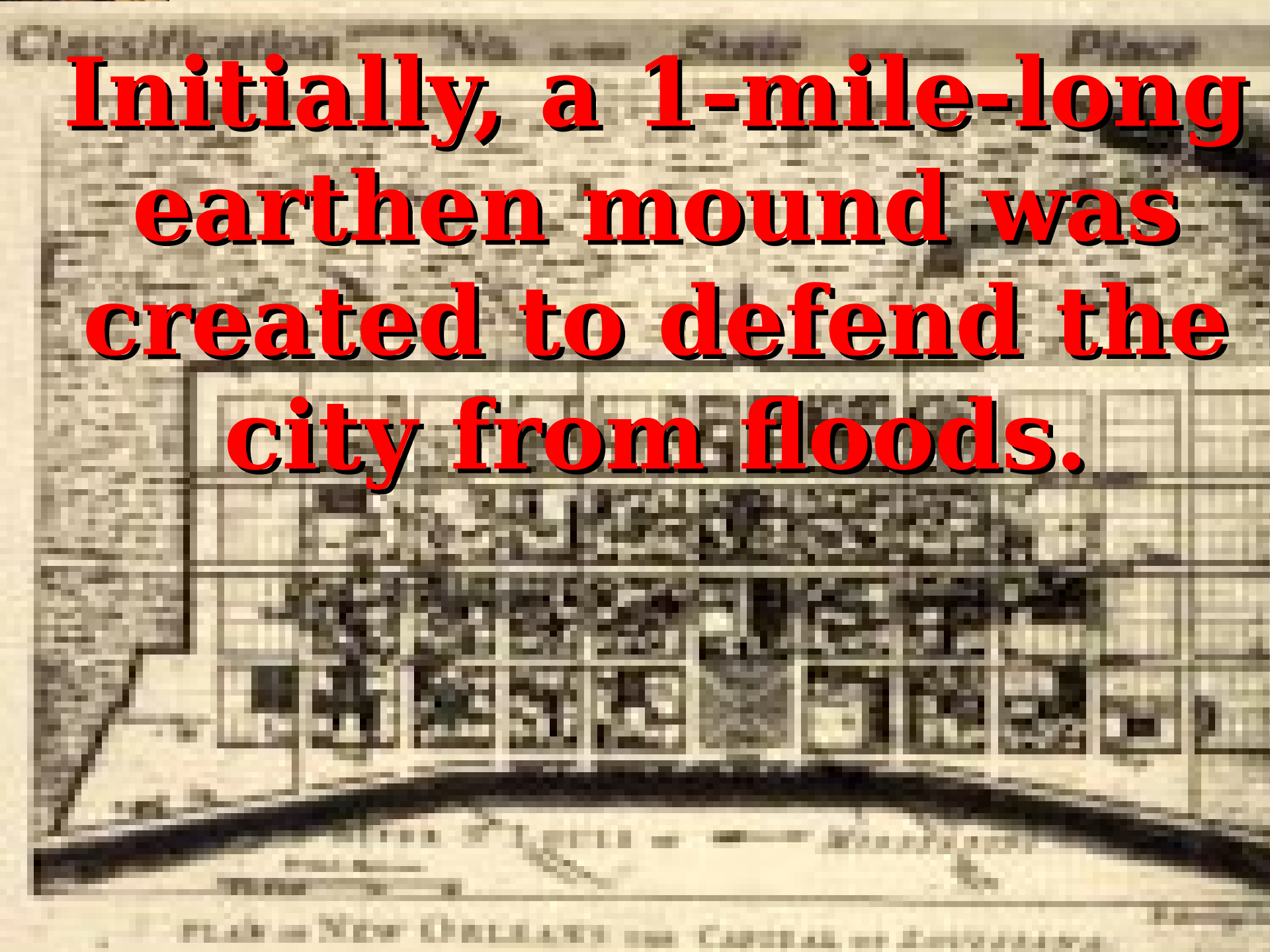
THE MISSISSIPPI RIVER'S DELTA OR DELTAIC PLAIN

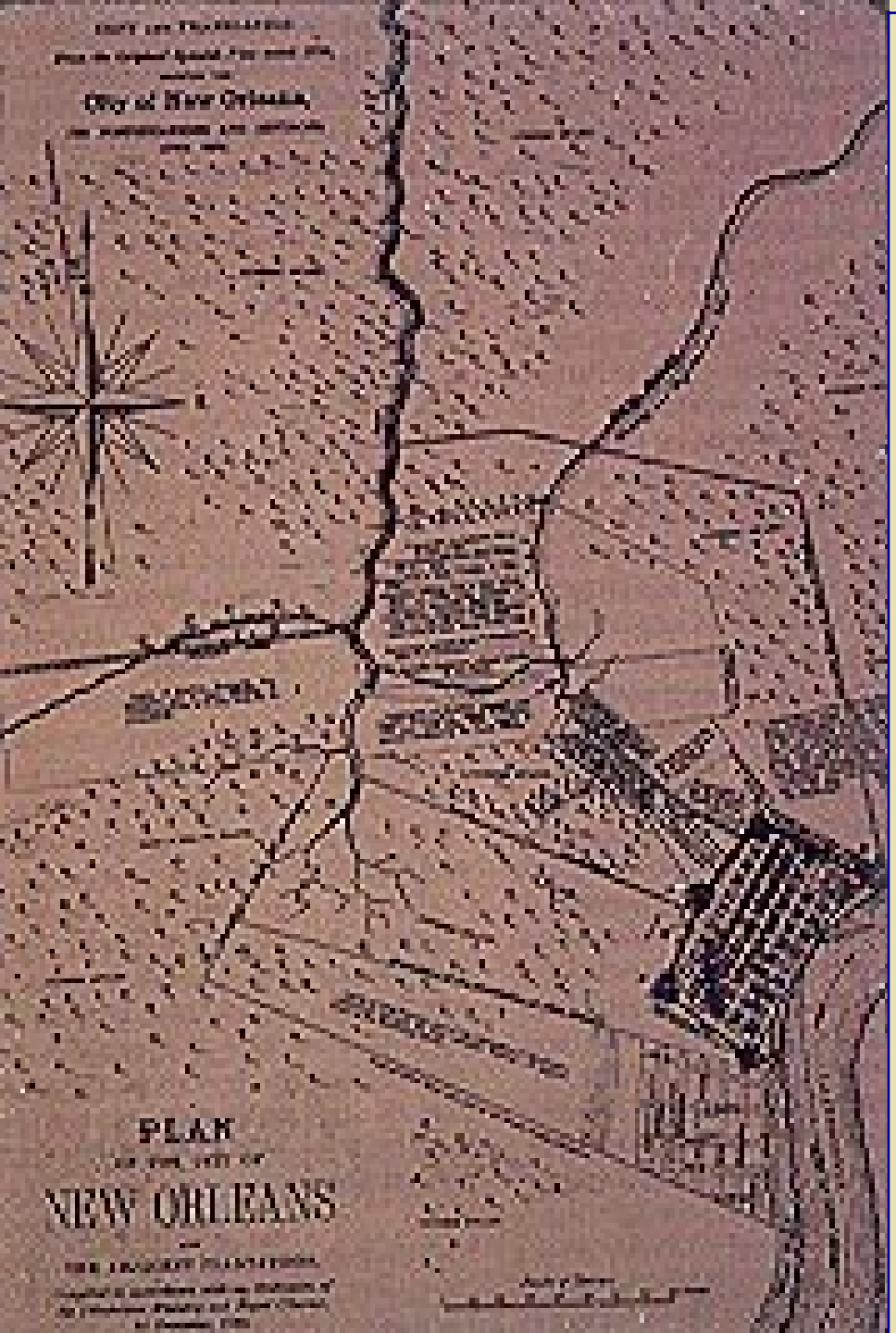
Sub-aqueous organic ooze

uisiana’s marshes are best descri
as a sea of grass

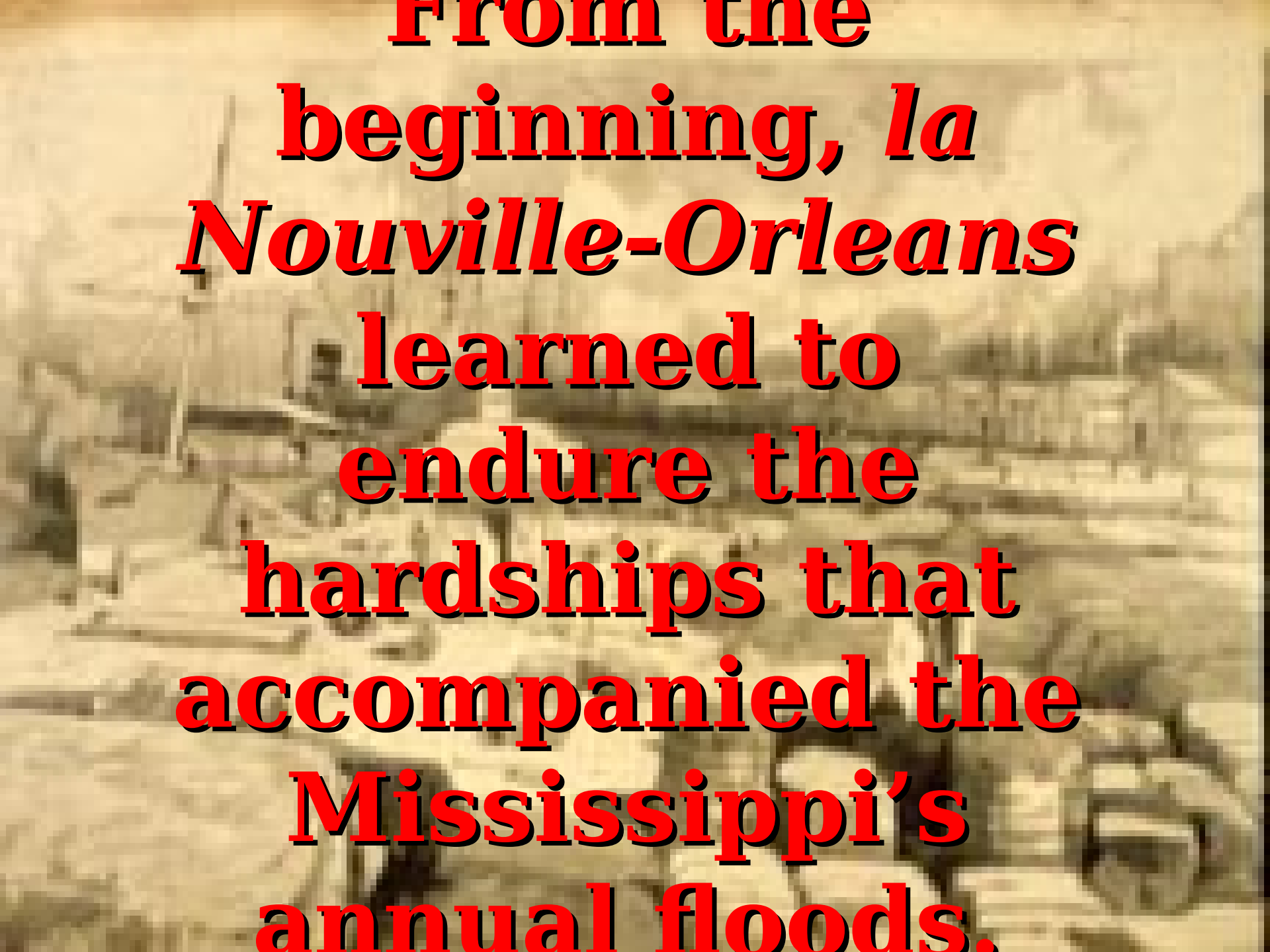

New Orleans could not be built until the water receded from the 1717 flood

DUBREUIL CONCESSION
AND LEVEE
Joseph Villars Dubreuil settled here in 1719. He became a pioneer in agriculture and wealthy entrepreneur. Nearby he built the first plantation levee. It led to the creation in 1724 of the Mississippi River's original levee system.

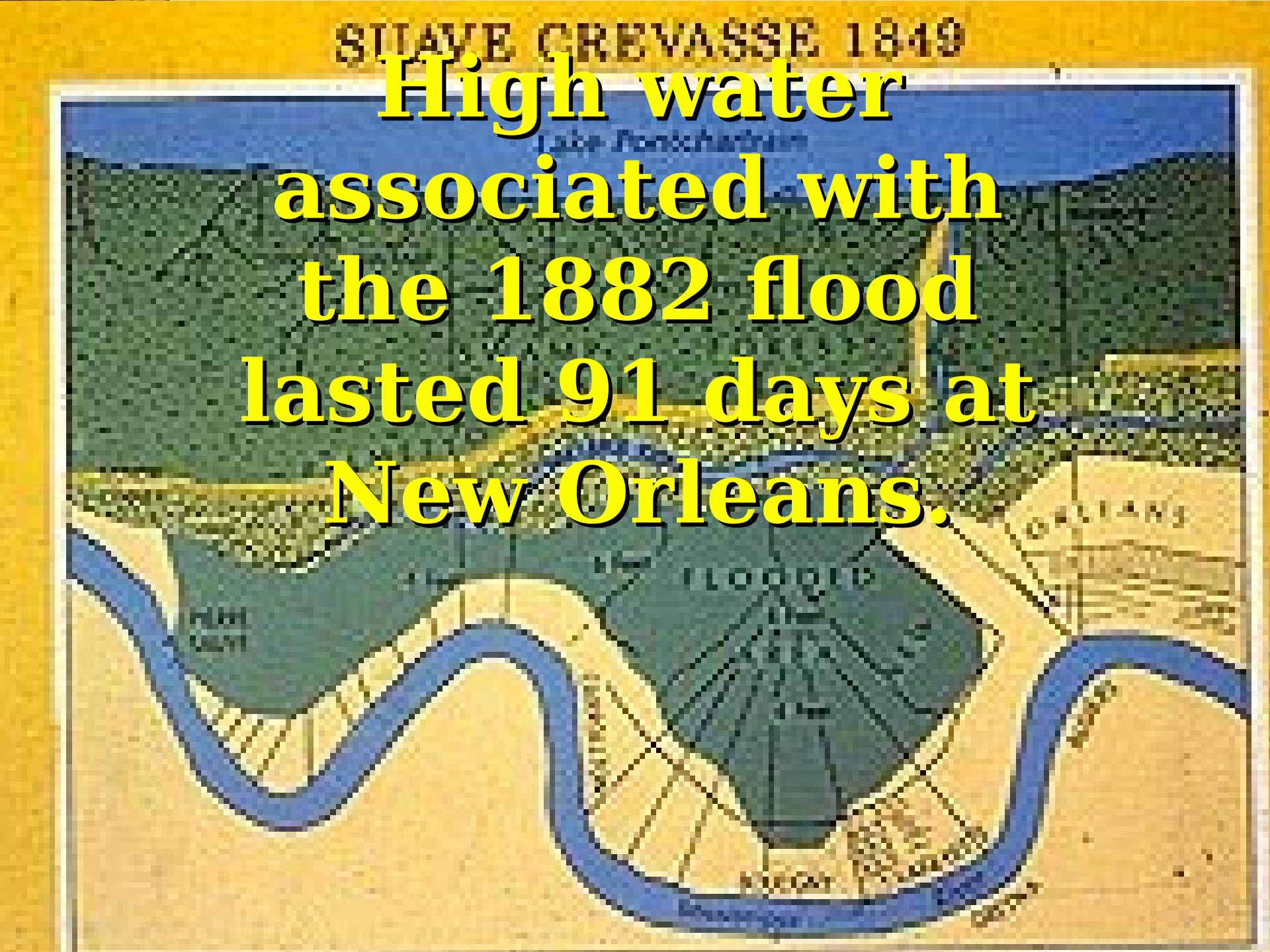

Initially, a 1-mile-long earthen mound was created to defend the city from floods.



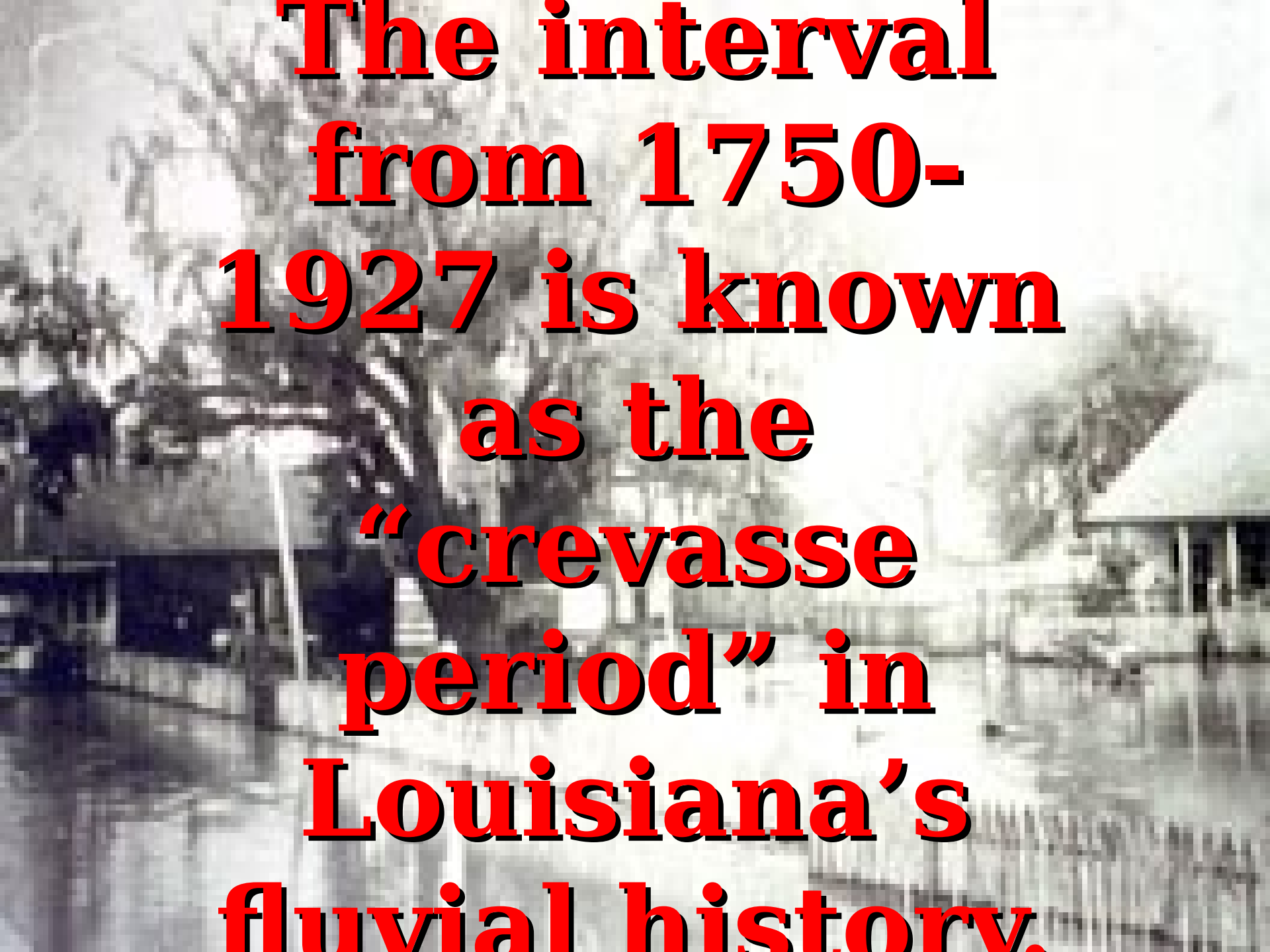
NEW ORLEANS BEGAN TO EXPAND INTO THE PEATS, MUCKS AND COFFEE GROUNDS OF THE

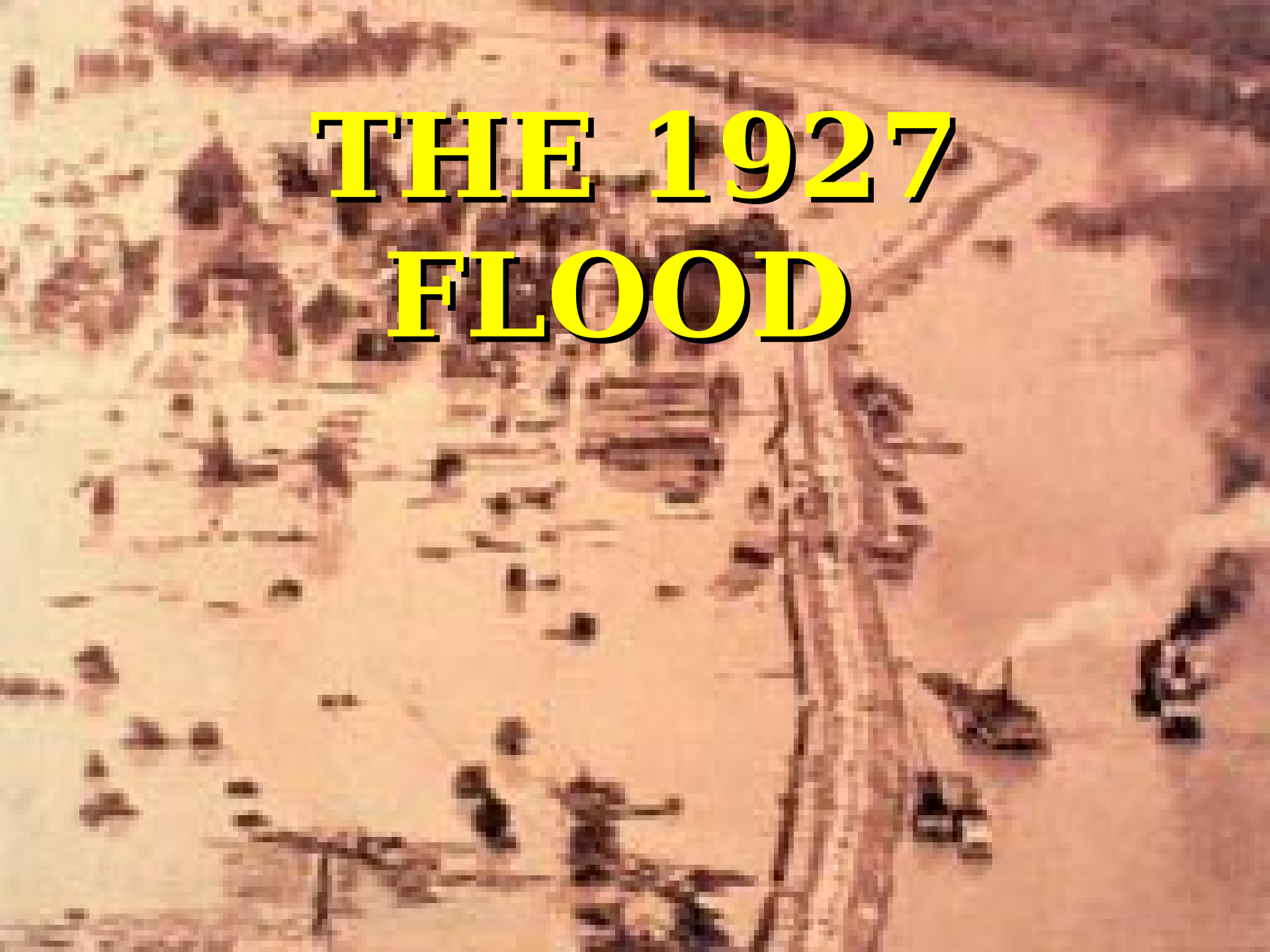

From the
beginning, *la*
Nouville-Orleans
learned to
endure the
hardships that
accompanied the
Mississippi's
annual floods.

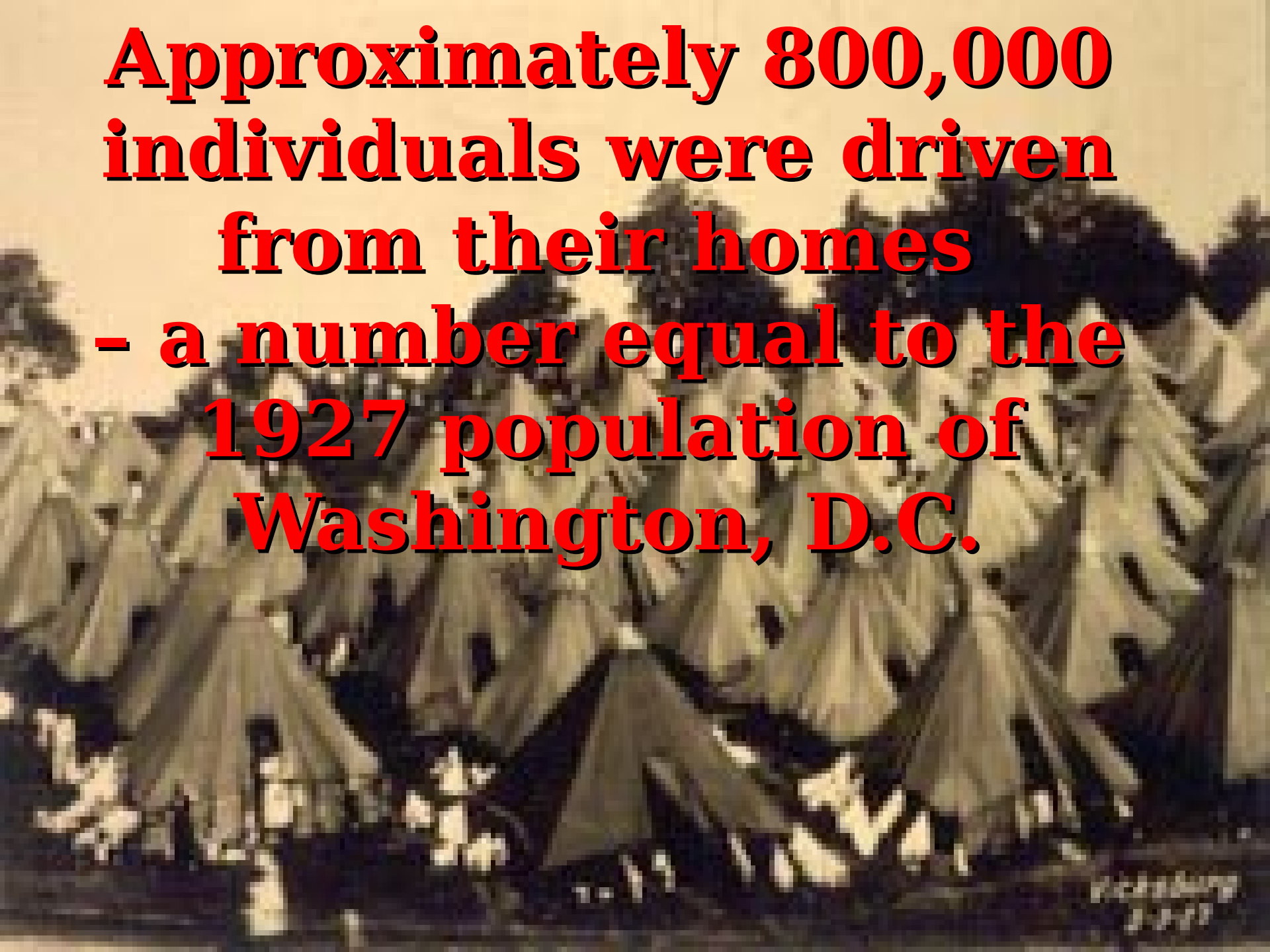
Before construction of artificial levees, crevasses were a common event along the Mississippi River.



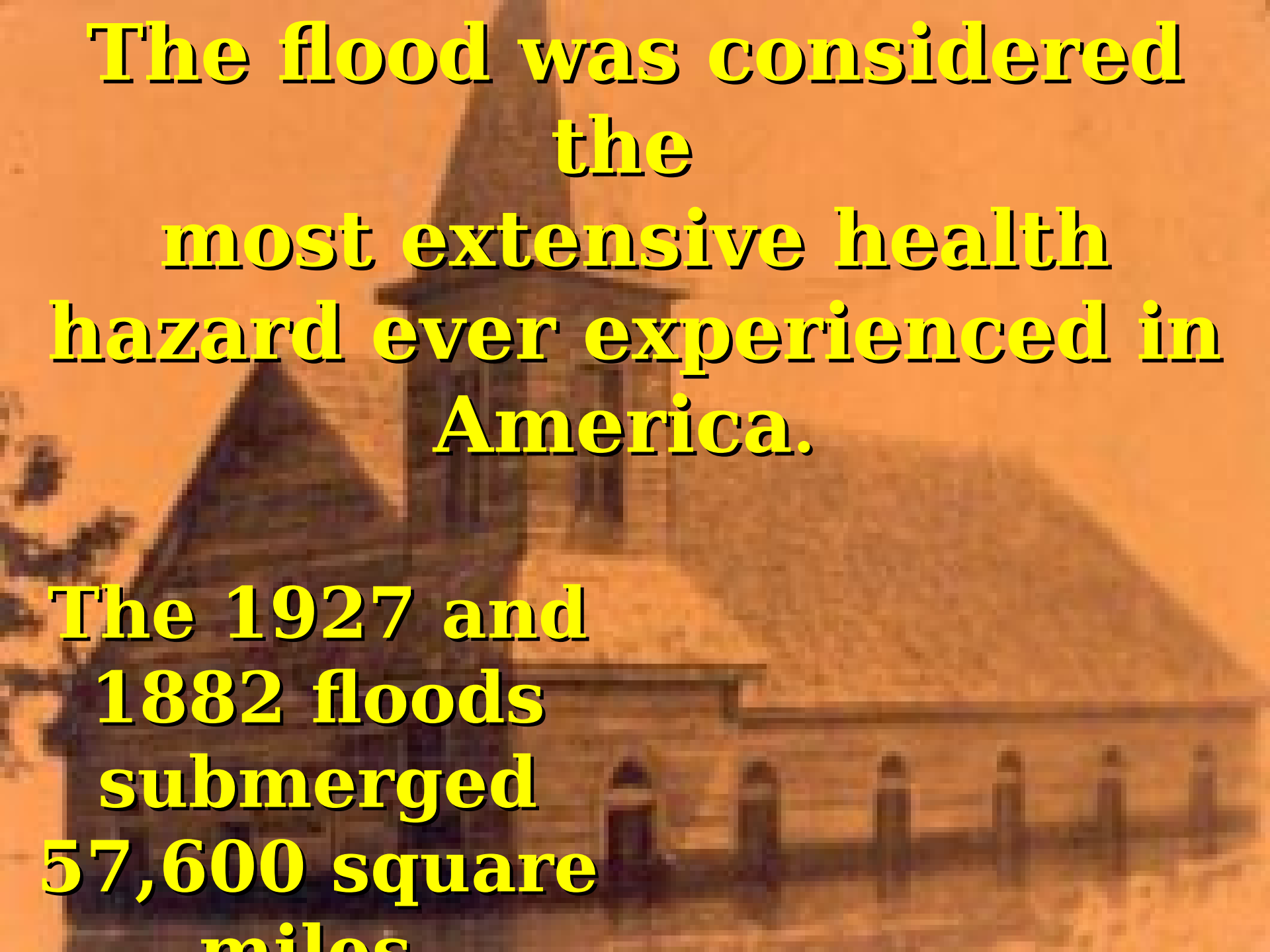
High water associated with the 1882 flood lasted 91 days at New Orleans.


The interval from 1750-1927 is known as the “crevasse period” in Louisiana’s fluvial history.


THE 1927
FLOOD



Approximately 800,000 individuals were driven from their homes – a number equal to the 1927 population of Washington, D.C.



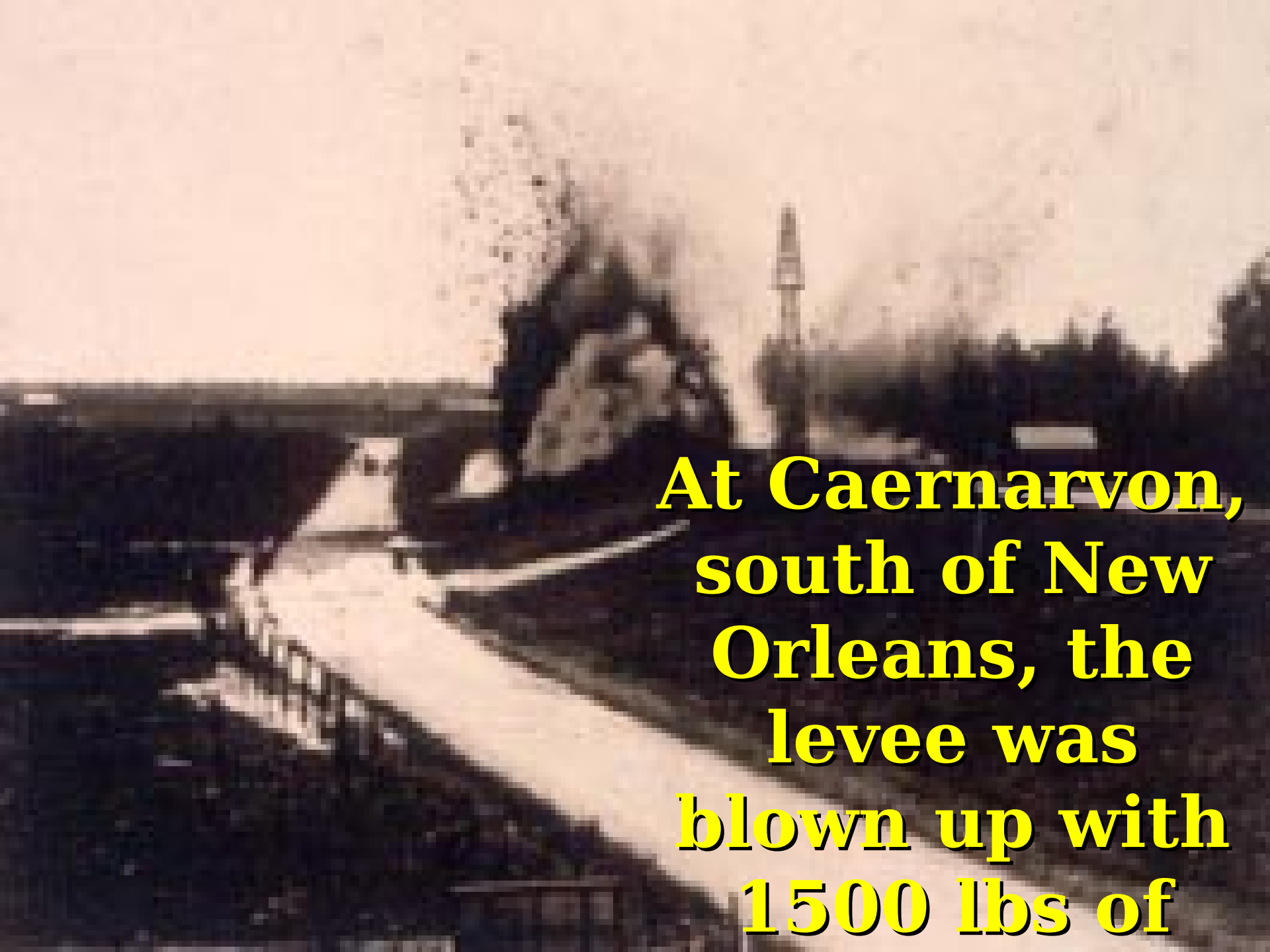
The flood was considered the most extensive health hazard ever experienced in America.

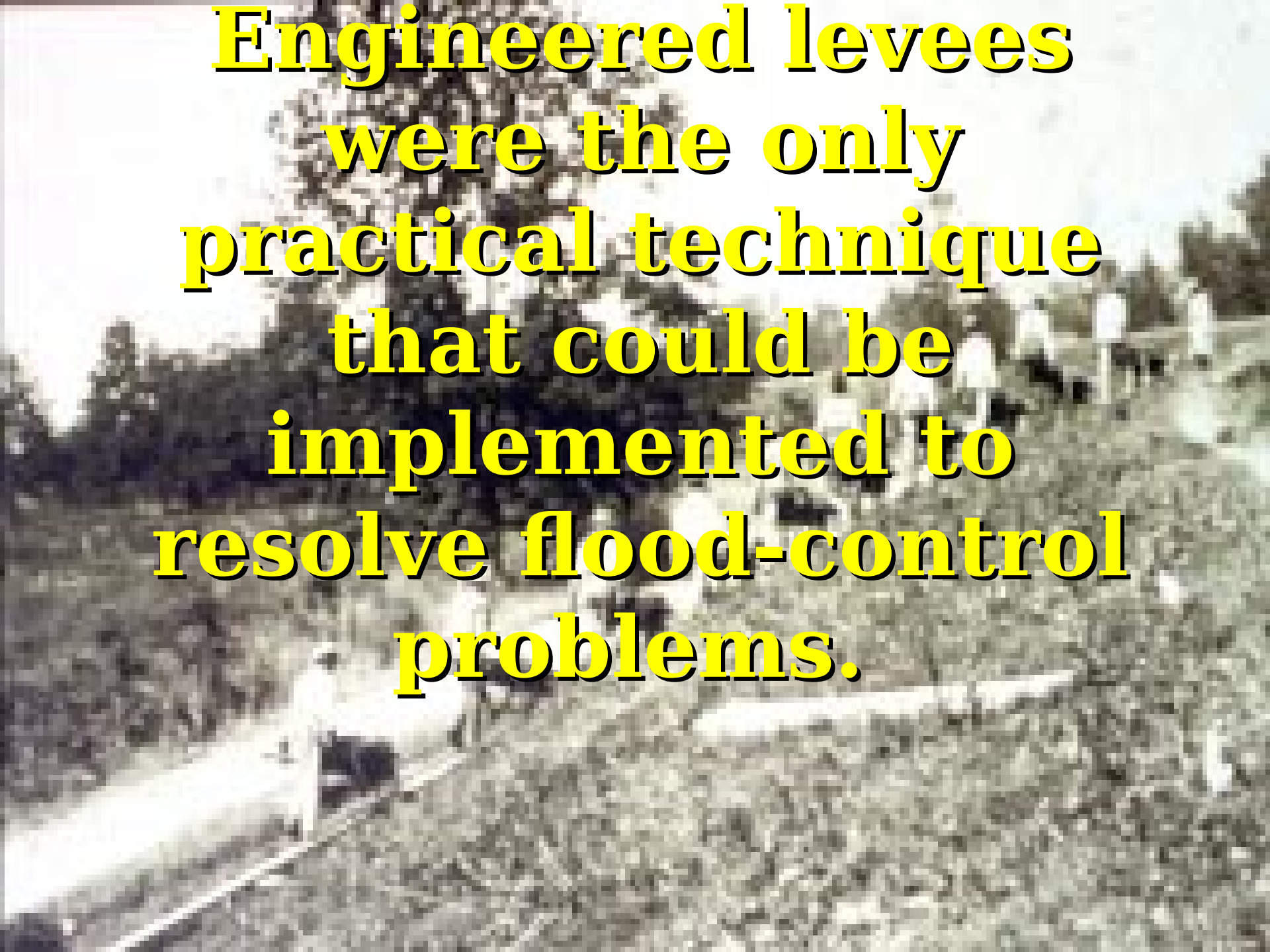
The 1927 and 1882 floods submerged 57,600 square miles

More than
500,000
individuals
were
vaccinated.

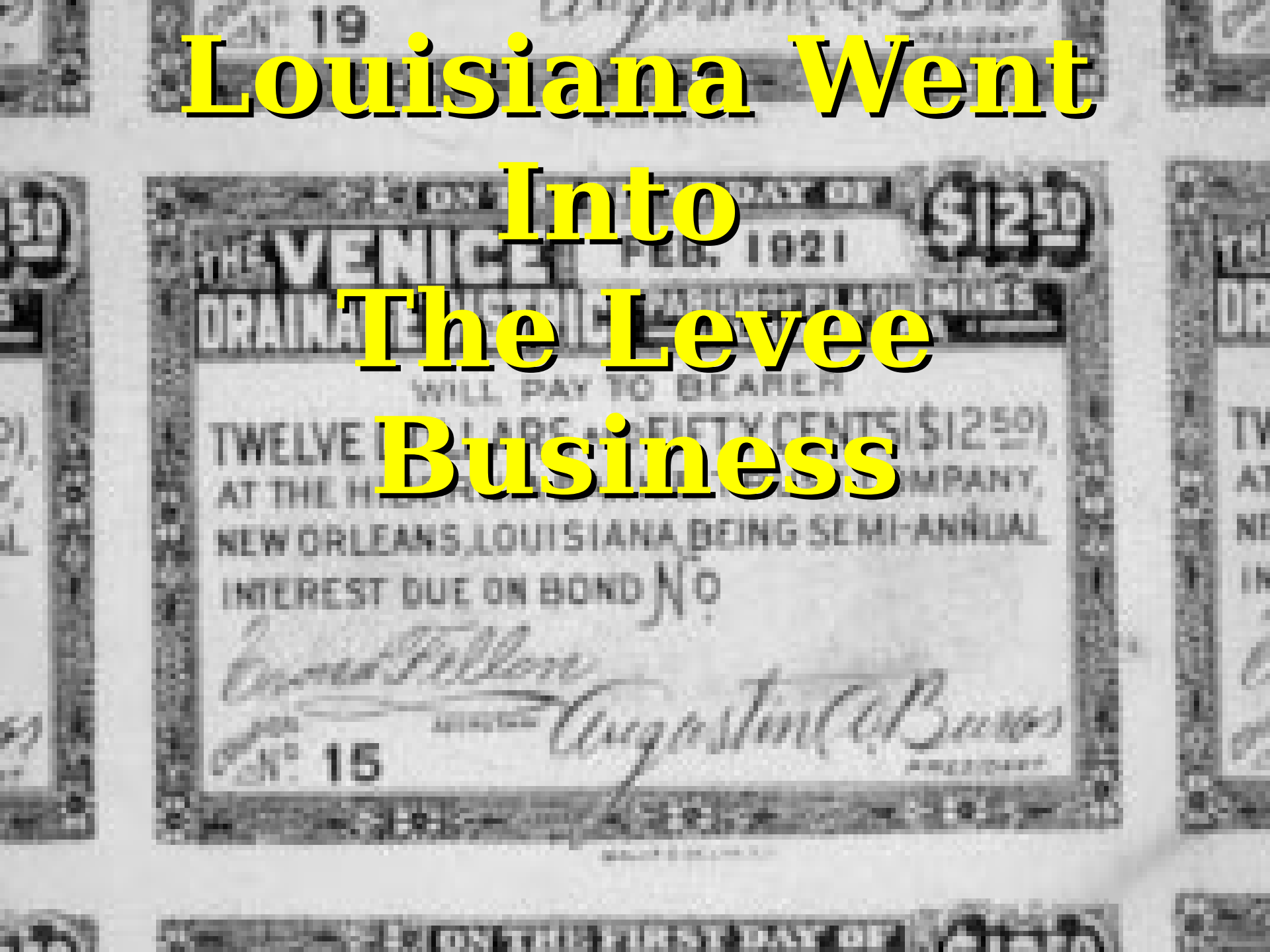
Water Was Everywhere!!

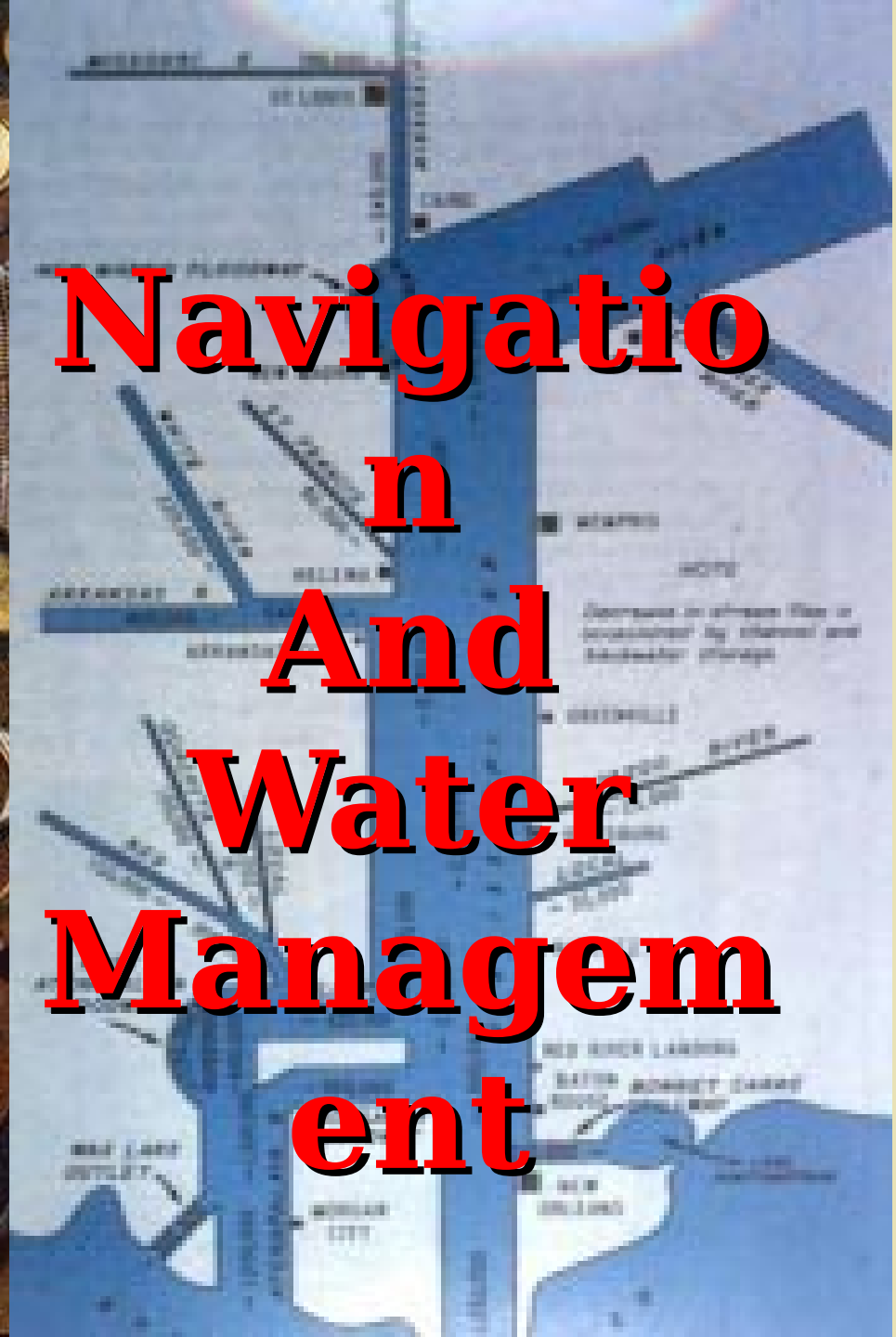
The flood of 1927 was considered the“greatest peace_time disaster in


At Caernarvon, south of New Orleans, the levee was blown up with 1500 lbs of


Engineered levees were the only practical technique that could be implemented to resolve flood-control problems.

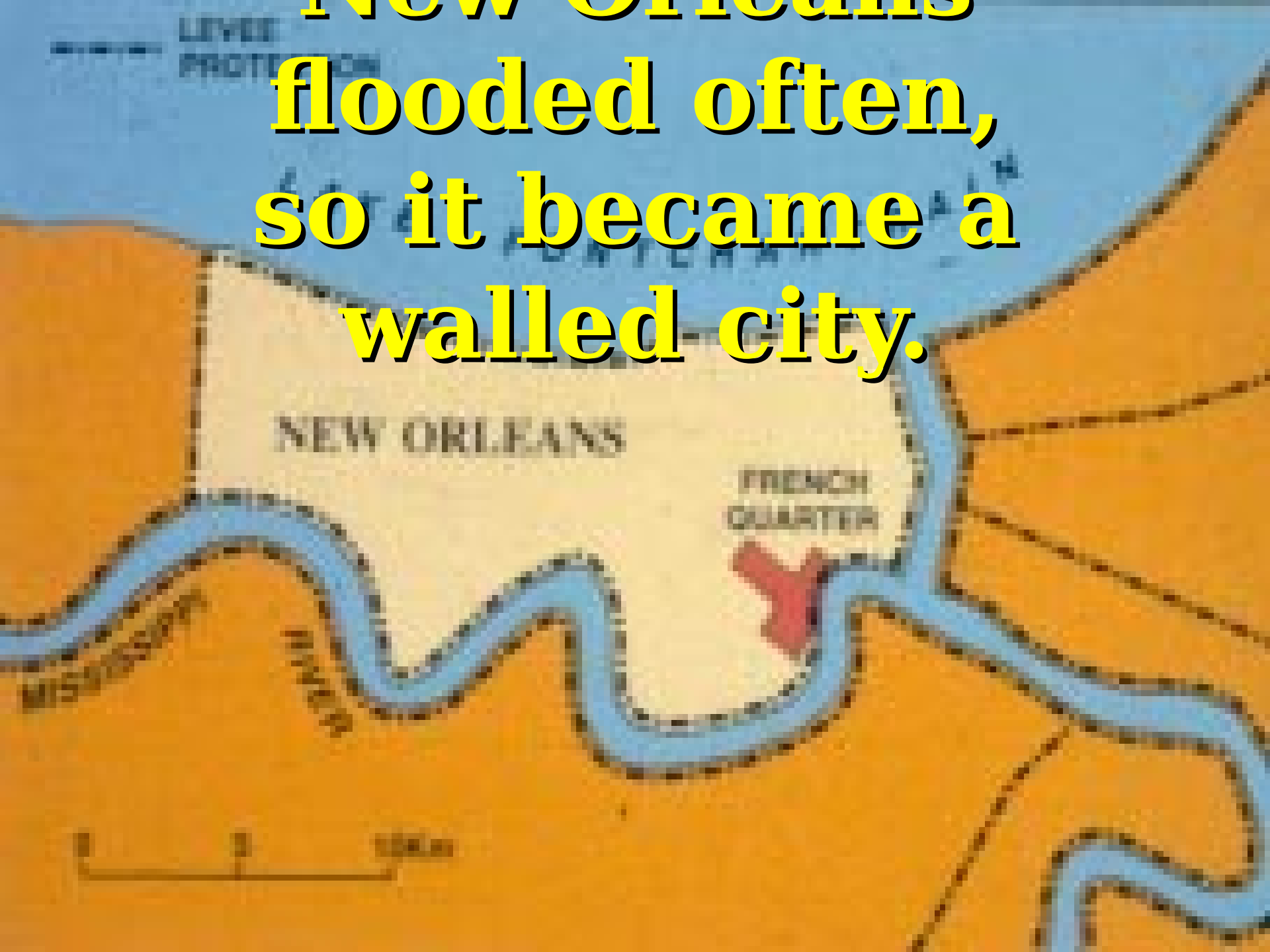
Louisiana Went Into The Levee Business



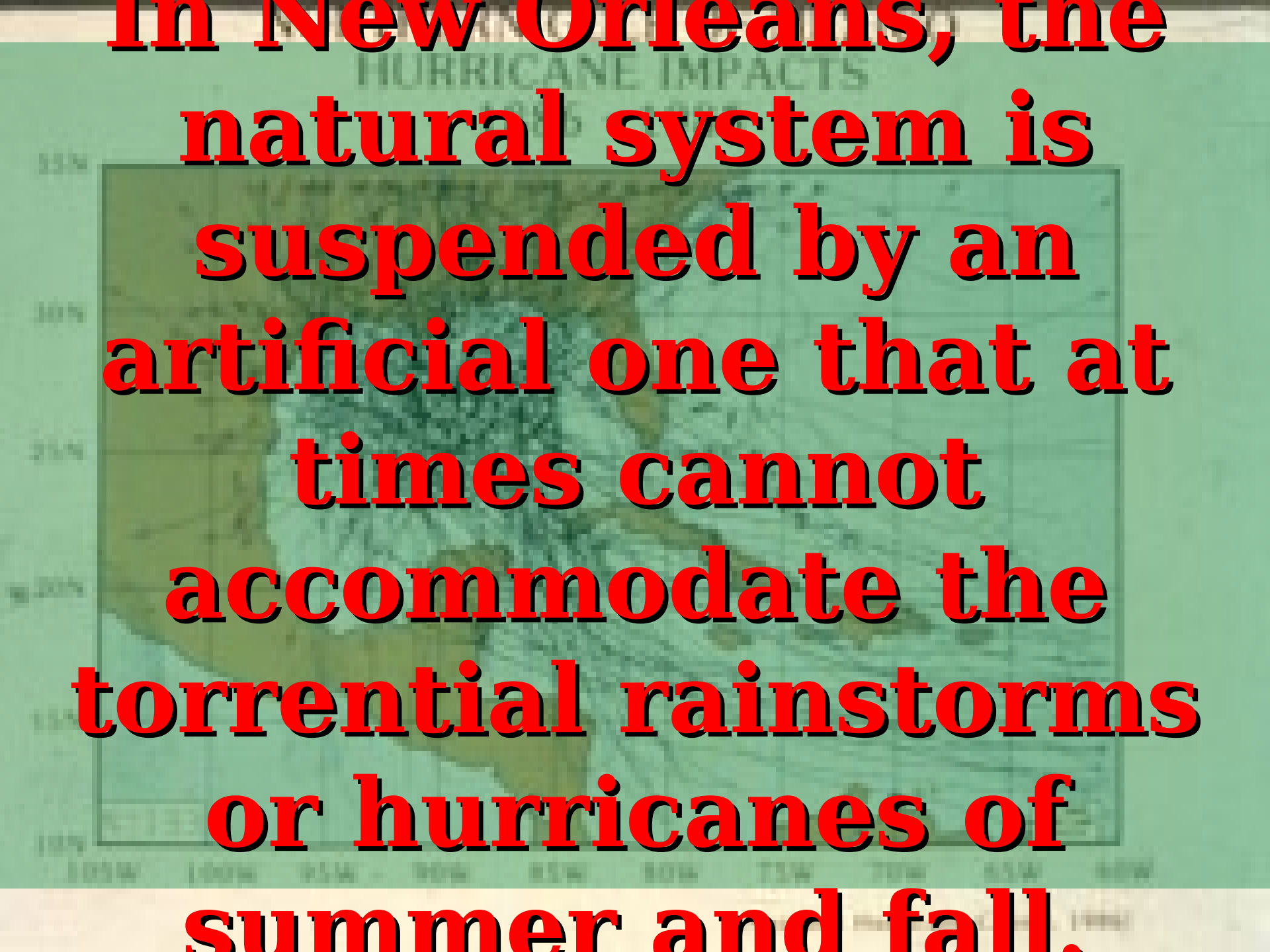


Navigation And Water Management

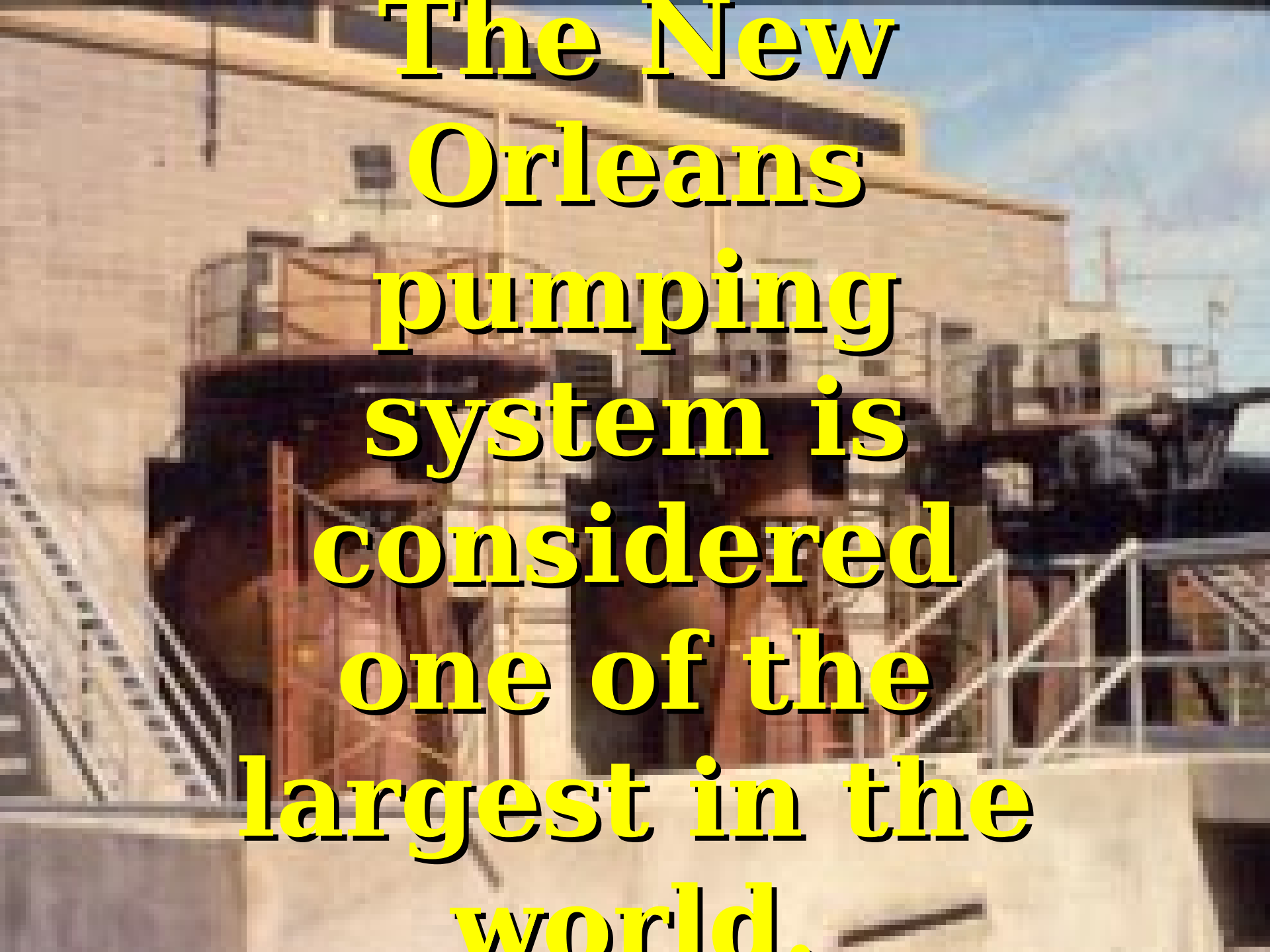
The Mississippi River is Locked into a Straight Jacket.

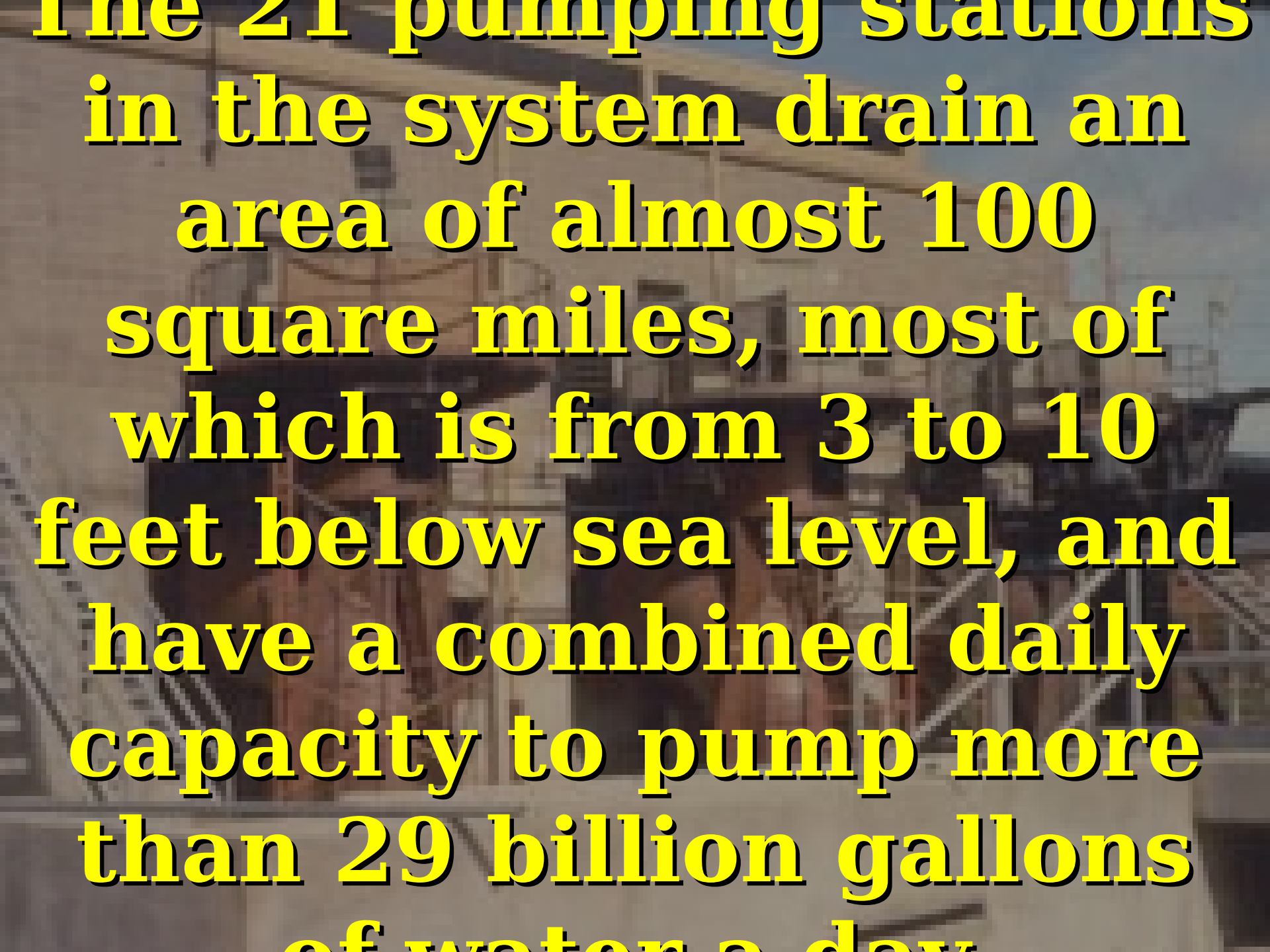


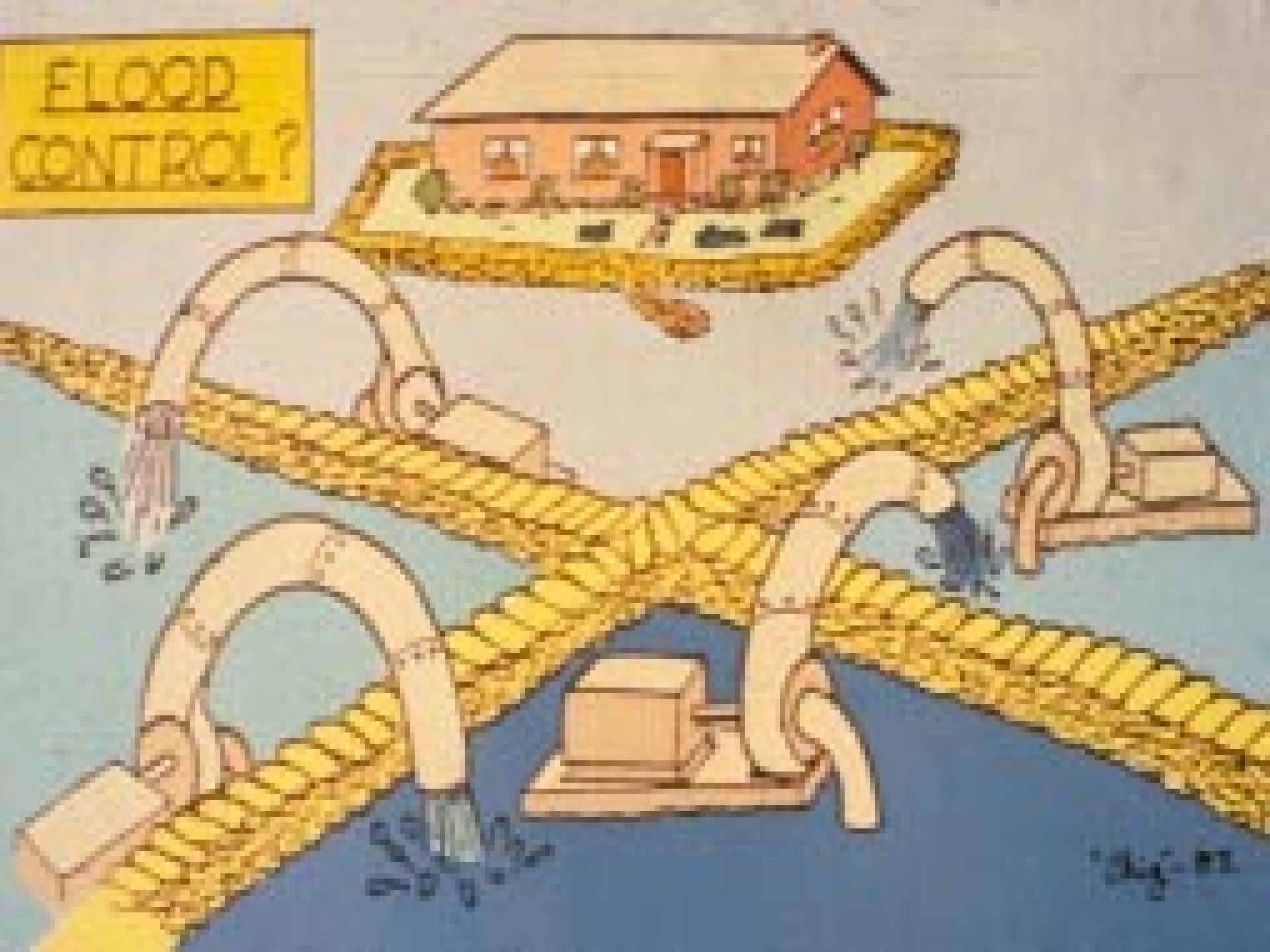
New Orleans flooded often, so it became a walled city.

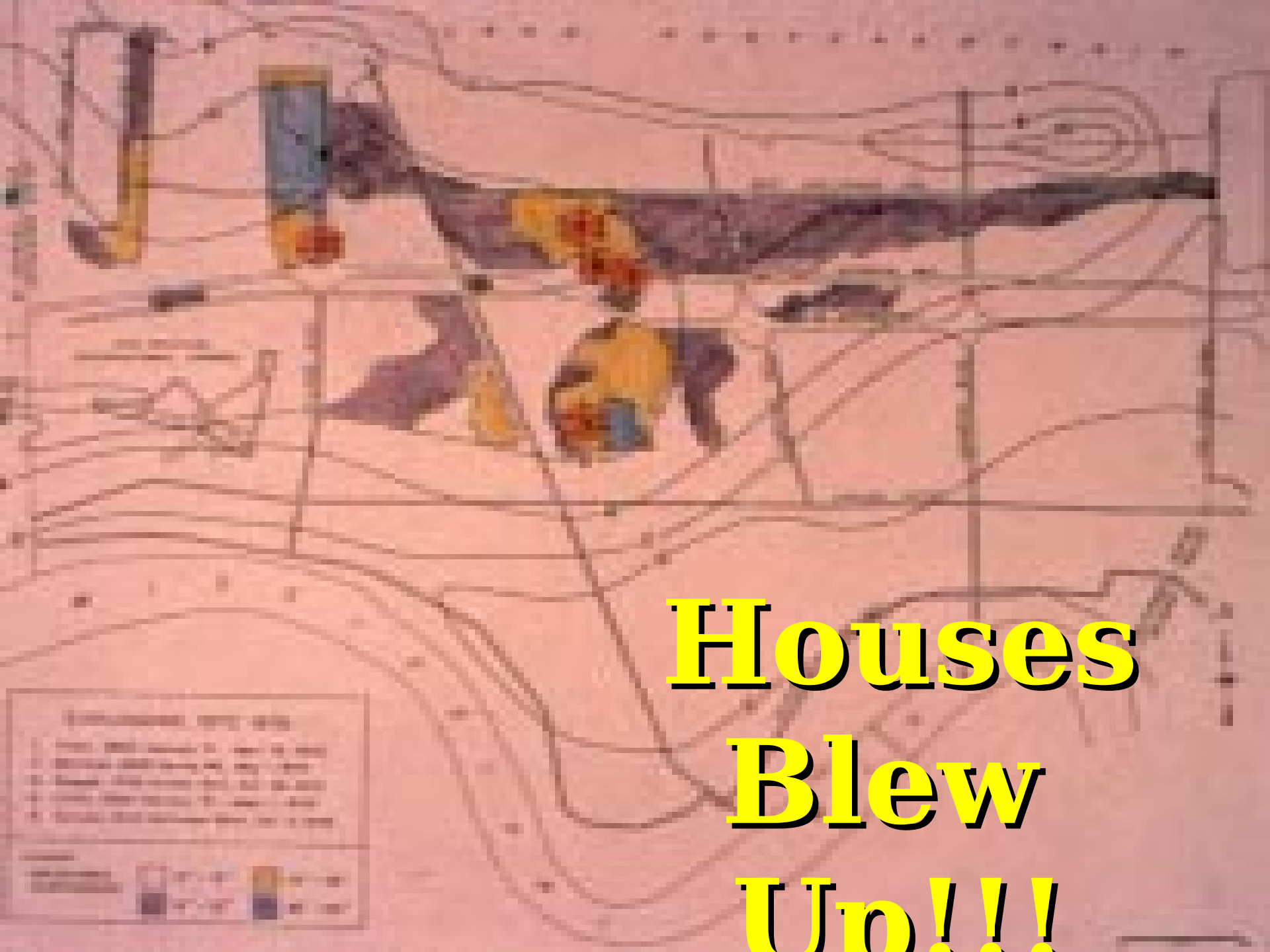


In New Orleans, the natural system is suspended by an artificial one that at times cannot accommodate the torrential rainstorms or hurricanes of summer and fall.


The New Orleans pumping system is considered one of the largest in the world.


The 21 pumping stations in the system drain an area of almost 100 square miles, most of which is from 3 to 10 feet below sea level, and have a combined daily capacity to pump more than 29 billion gallons


FLOOD
CONTROL?

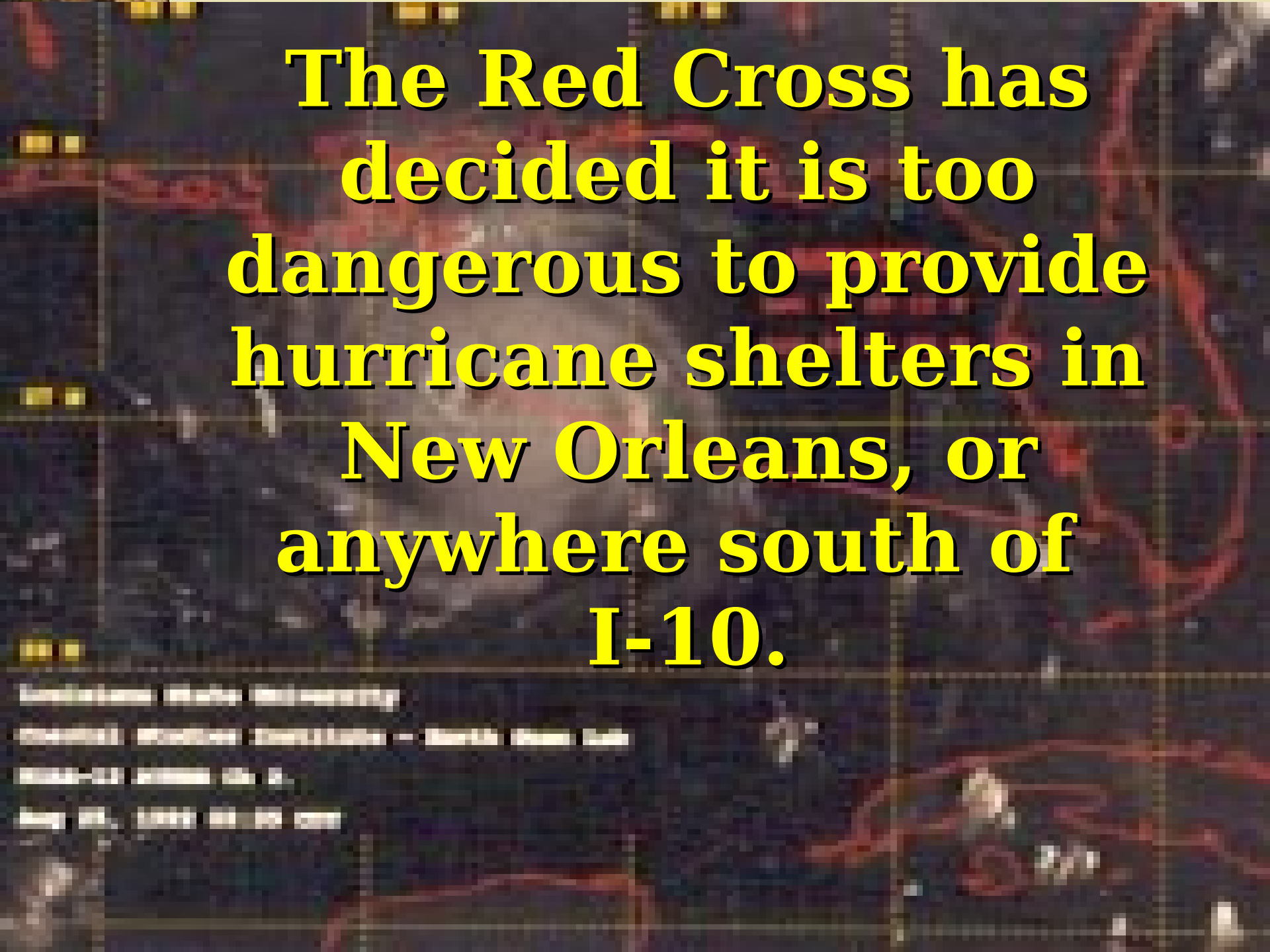

Houses
Blew
Up!!!

NORTHERN GULF OF MEXICO
HURRICANE IMPACTS
1886 - 1985
HURRICANES
ARE AN
ISSUE!!

CHENIER CAMINADA: THE FORGOTTEN STORM!!!

Over a 20 year period from 1975-1994, the U.S. spent approximately 250 million per week (13 billion/year) on meteorological natural disasters. During this period insured property losses for damages amounted to $73 billion.

From: The Natural Hazards Research and Application Information Center

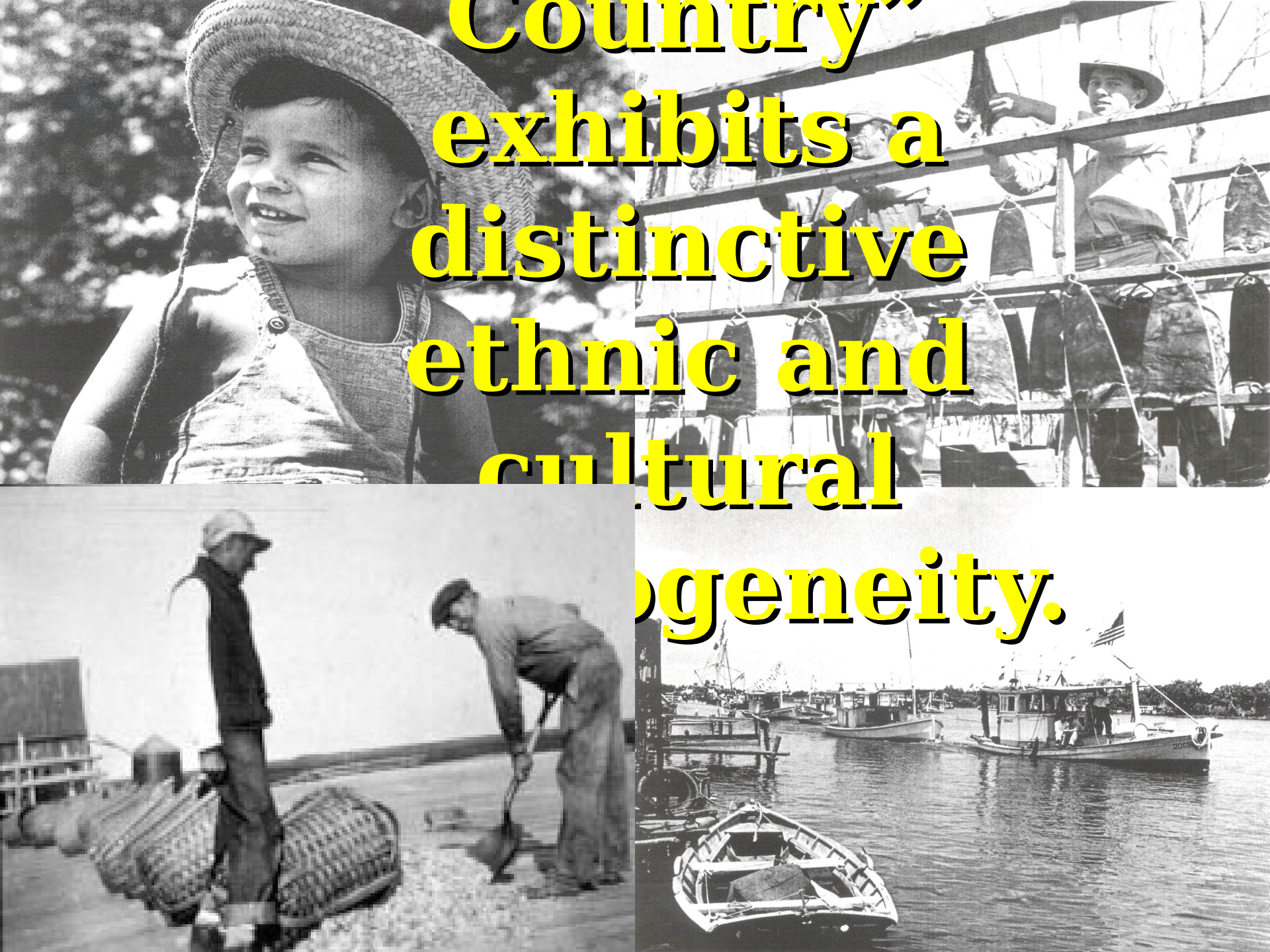

The Red Cross has decided it is too dangerous to provide hurricane shelters in New Orleans, or anywhere south of I-10.

“If you don’t evacuate New Orleans, the best thing you can do is tie a tag around your toe so we can identify your body.”

Brett Kreiger, director of the state Office of Emergency Preparedness

The wrong storm could put 20 feet of water in Jackson Square.

The Human Mosaic

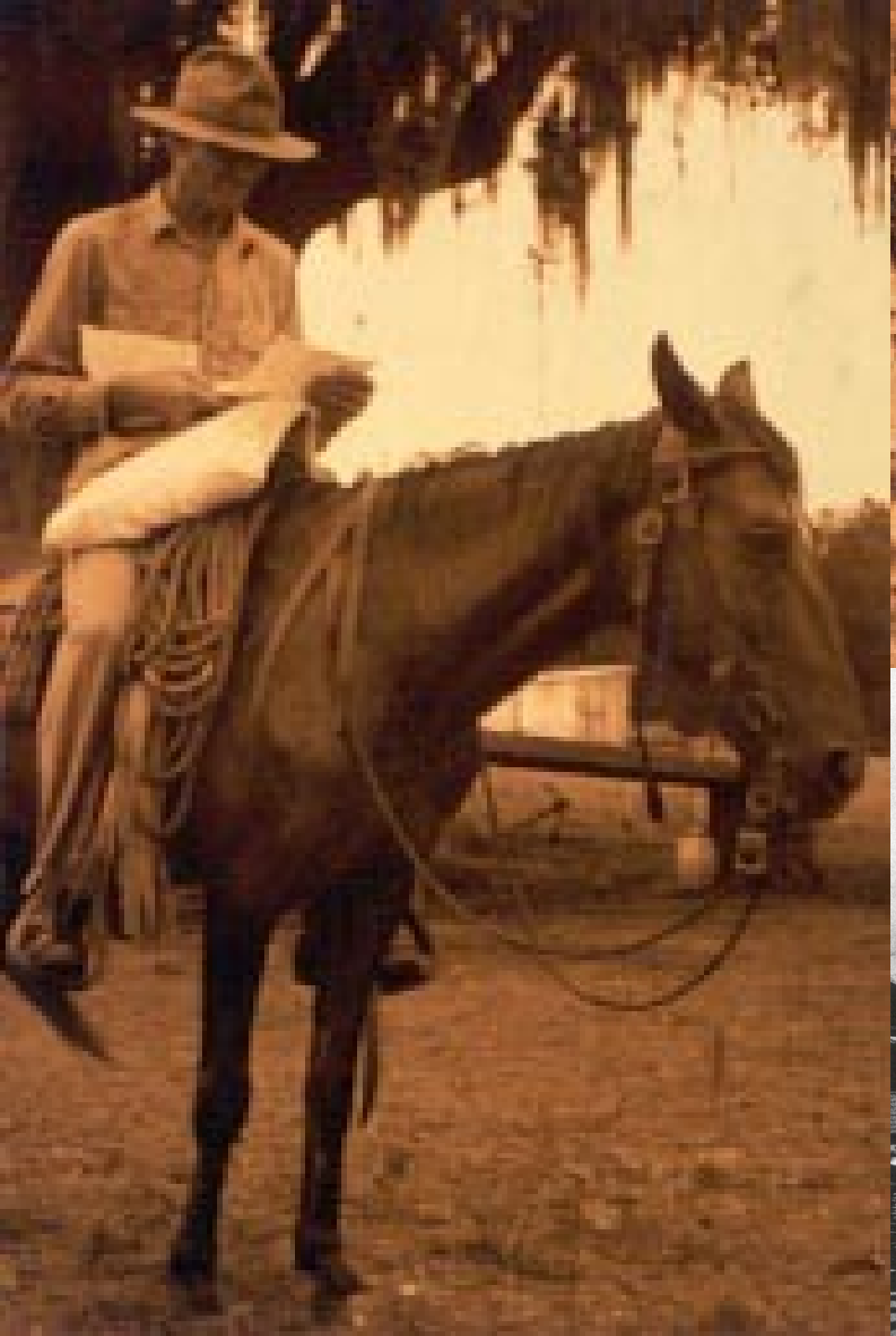

Country" exhibits a distinctive ethnic and cultural
ogeneity.

TEX·A·COON
SEAFOOD
DULAC LA
CO.INC.
563·42

Acadian

Acadien

FRENCH MOTHER TONGUE: U.S.-BORN WHITE POPULATION



THERIOT'S SUPER MARKET

Wetland Settlements

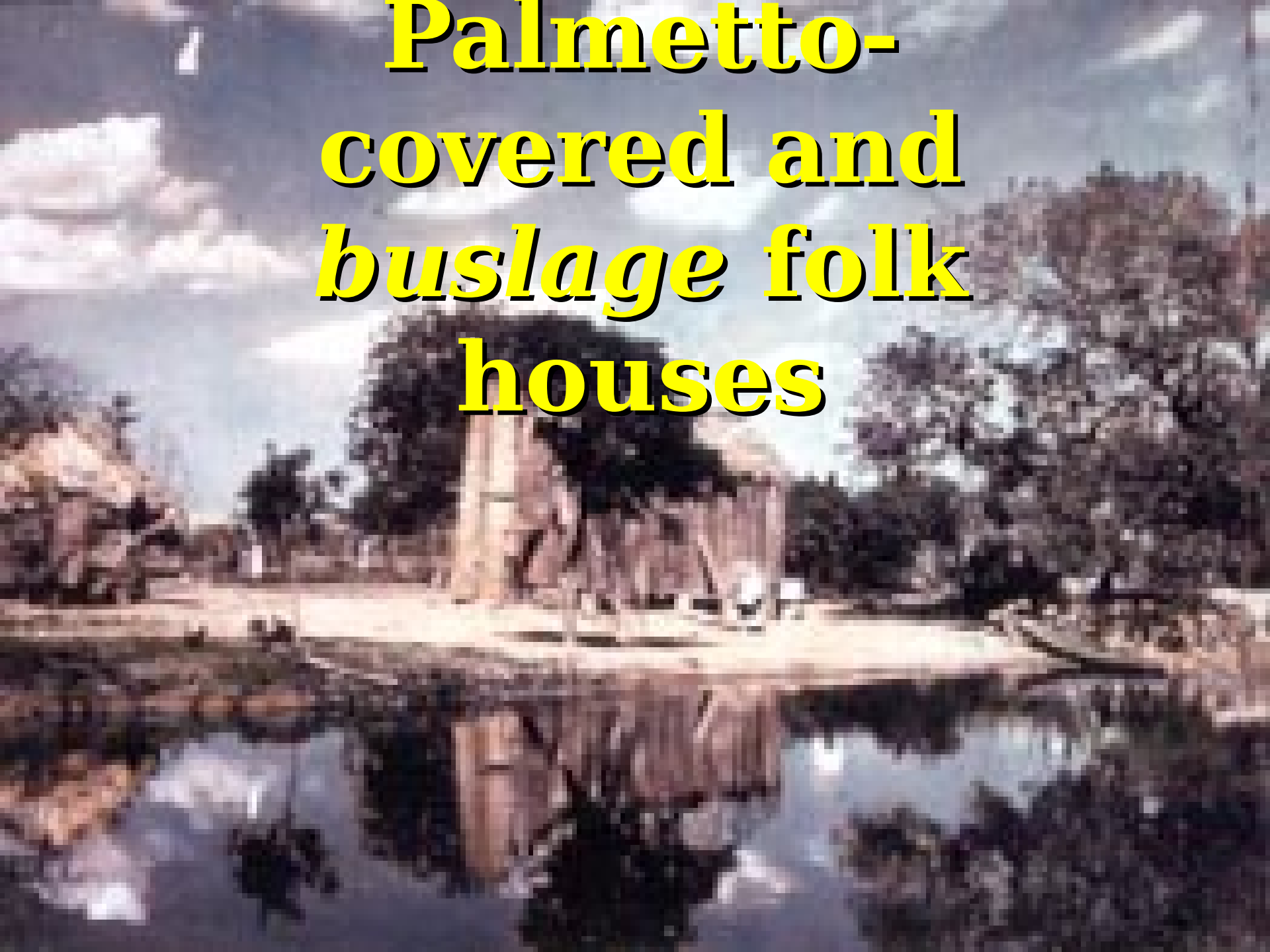
- Manila Village
- Basa Basa
- Camp Dewey
- Chenier Dufon
- Fifi's Island
- Bayou Andre
- Grand Isle
- Cheniere Caminada
- Cheniere Ronquille
- The Temple
- Seabreeze
- Coon Rhode
- Cocodrie
- Oyster Bayou
- Bayou Brouilleau
- Bird Island
- Razor Island
- Bayou Cook
- Clark's Ridge
- Bayou Challon
- Simon Bayou
- Grand Terre

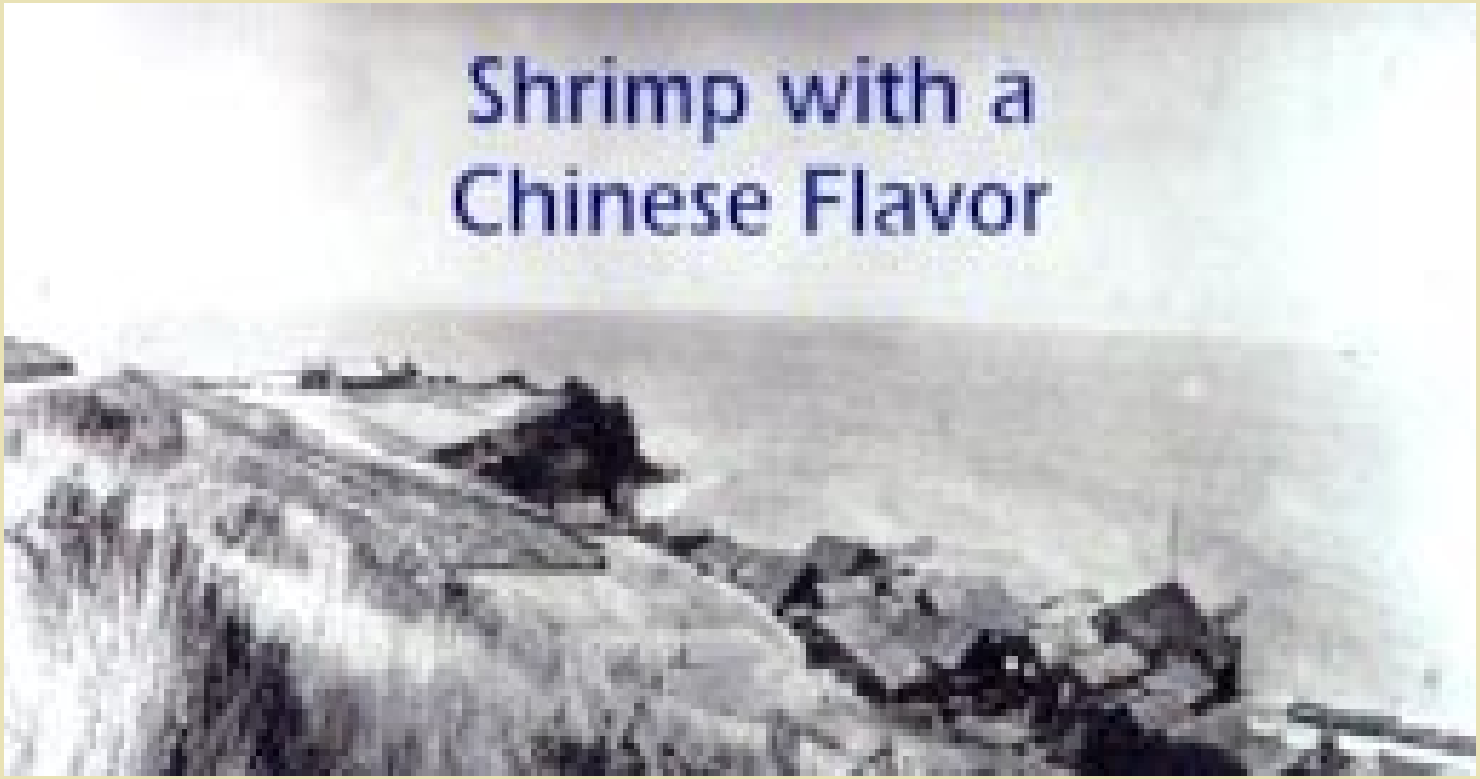
Milo – A Philippines Commun

were transformed into
villages of foreign-speaking
peasants.

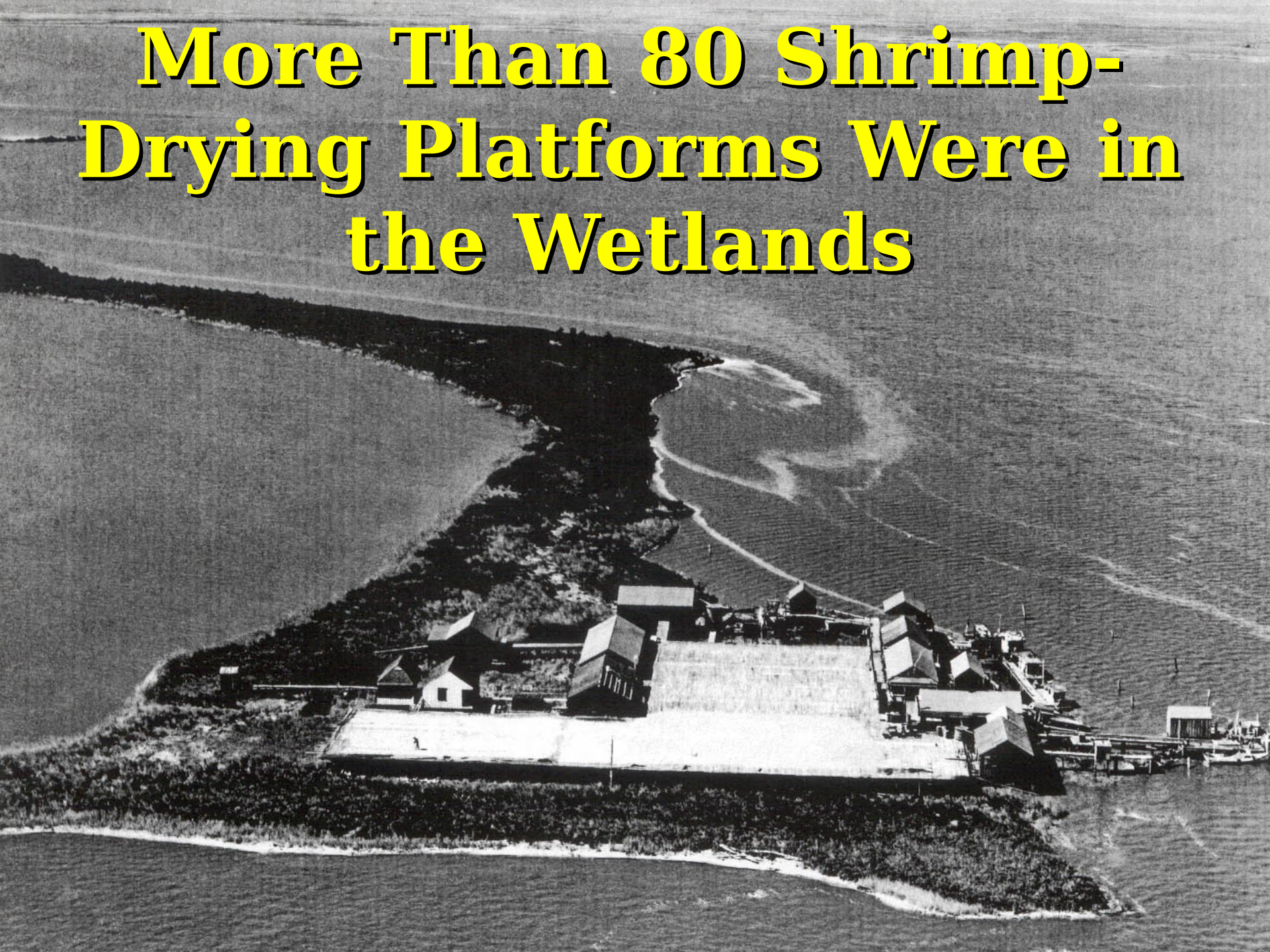
CHENIER CAMINADA

Four hundred fifty (450)
small homes were stretched
side-by-side in two long
lines.


Palmetto-
covered and
buslage folk
houses

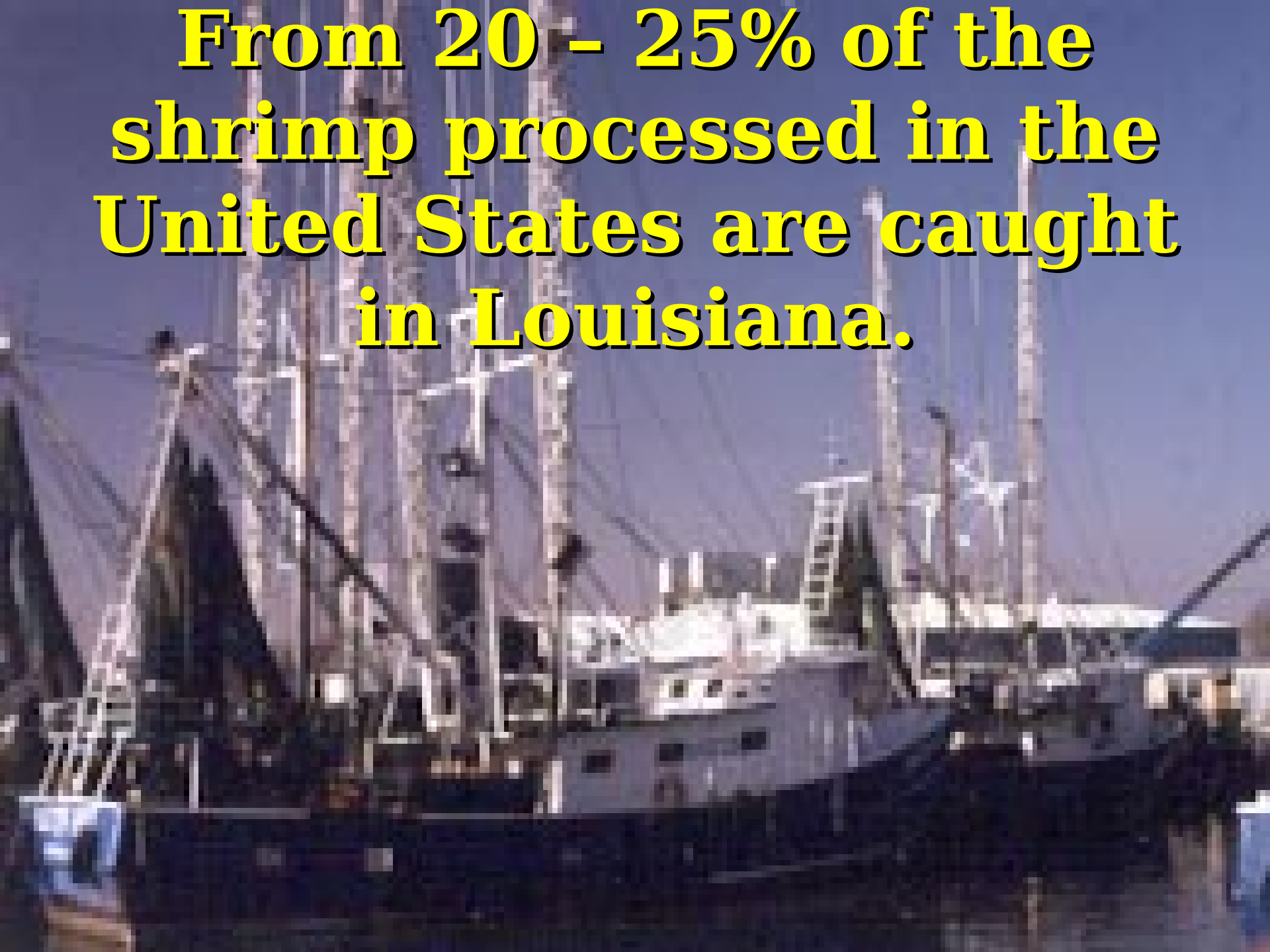

Shrimp with a
Chinese Flavor

More Than 80 Shrimp-Drying Platforms Were in the Wetlands

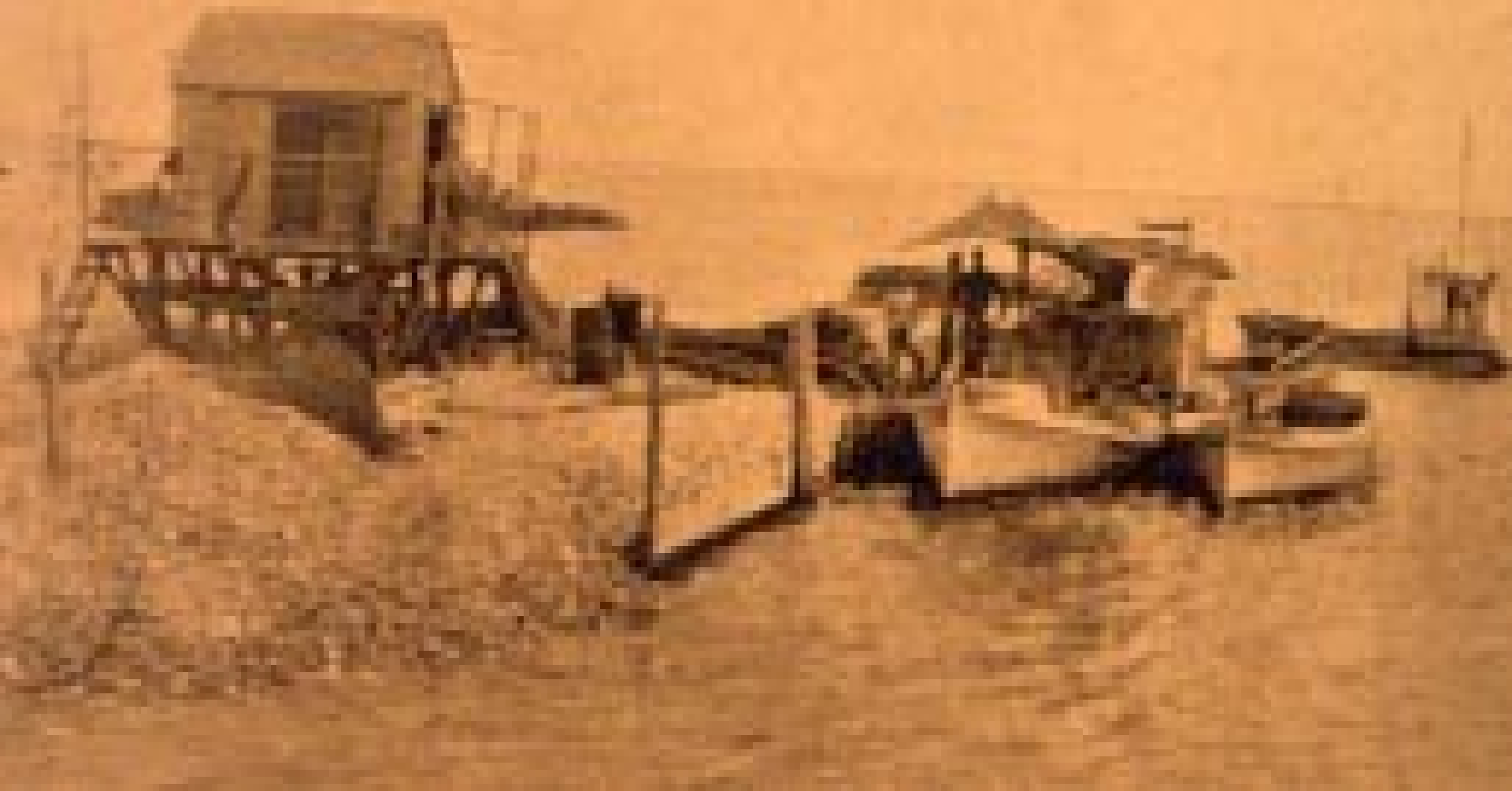


The otter trawl was introduced in 1917 revolutionized shrimping.

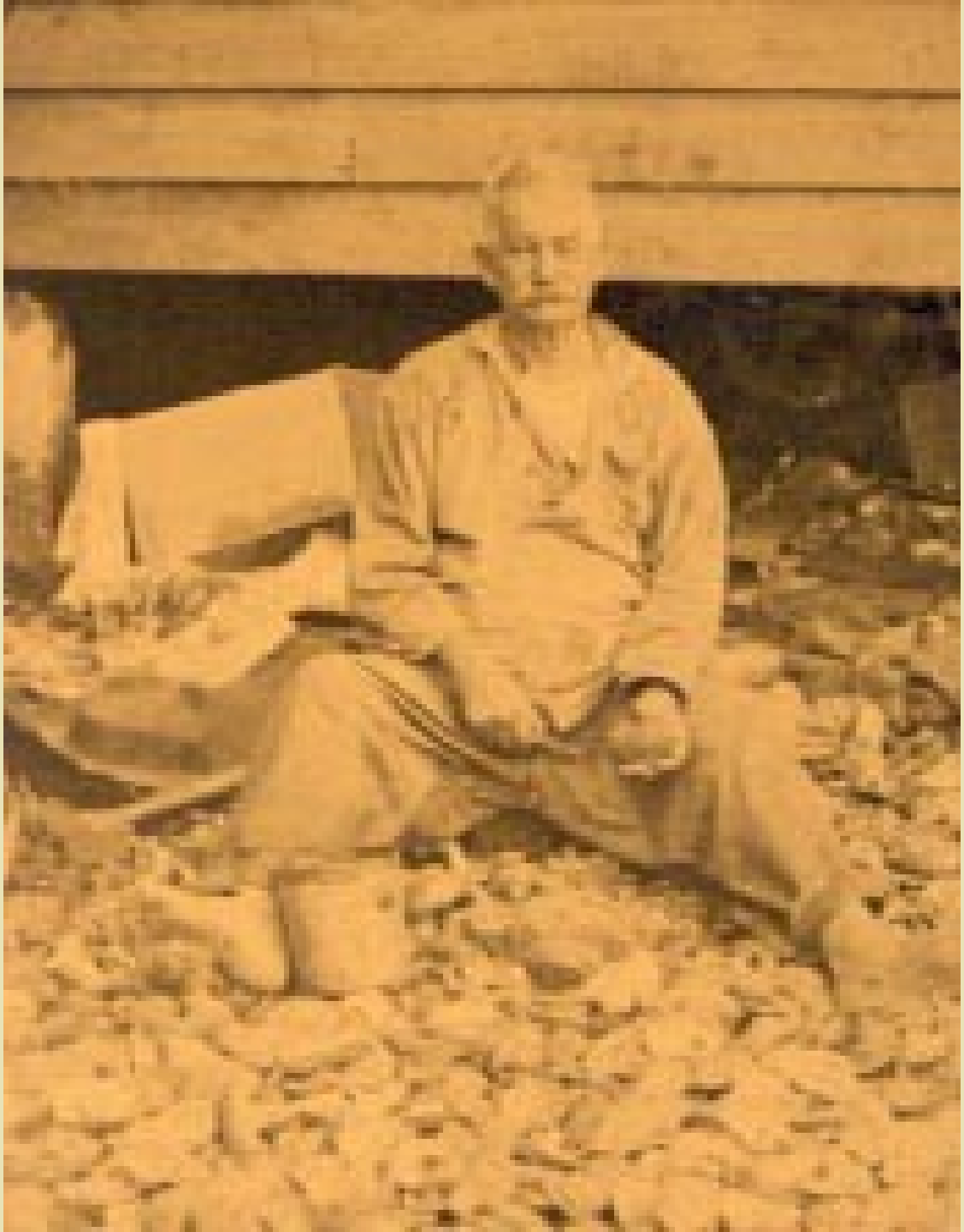
Ice Revolutionized Settlement Patterns: Humankind No Longer Had To Live In Isolated Communities


From 20 – 25% of the shrimp processed in the United States are caught in Louisiana.

Watermen Made Their Livin
rvesting Oysters From Isola
Settlements.

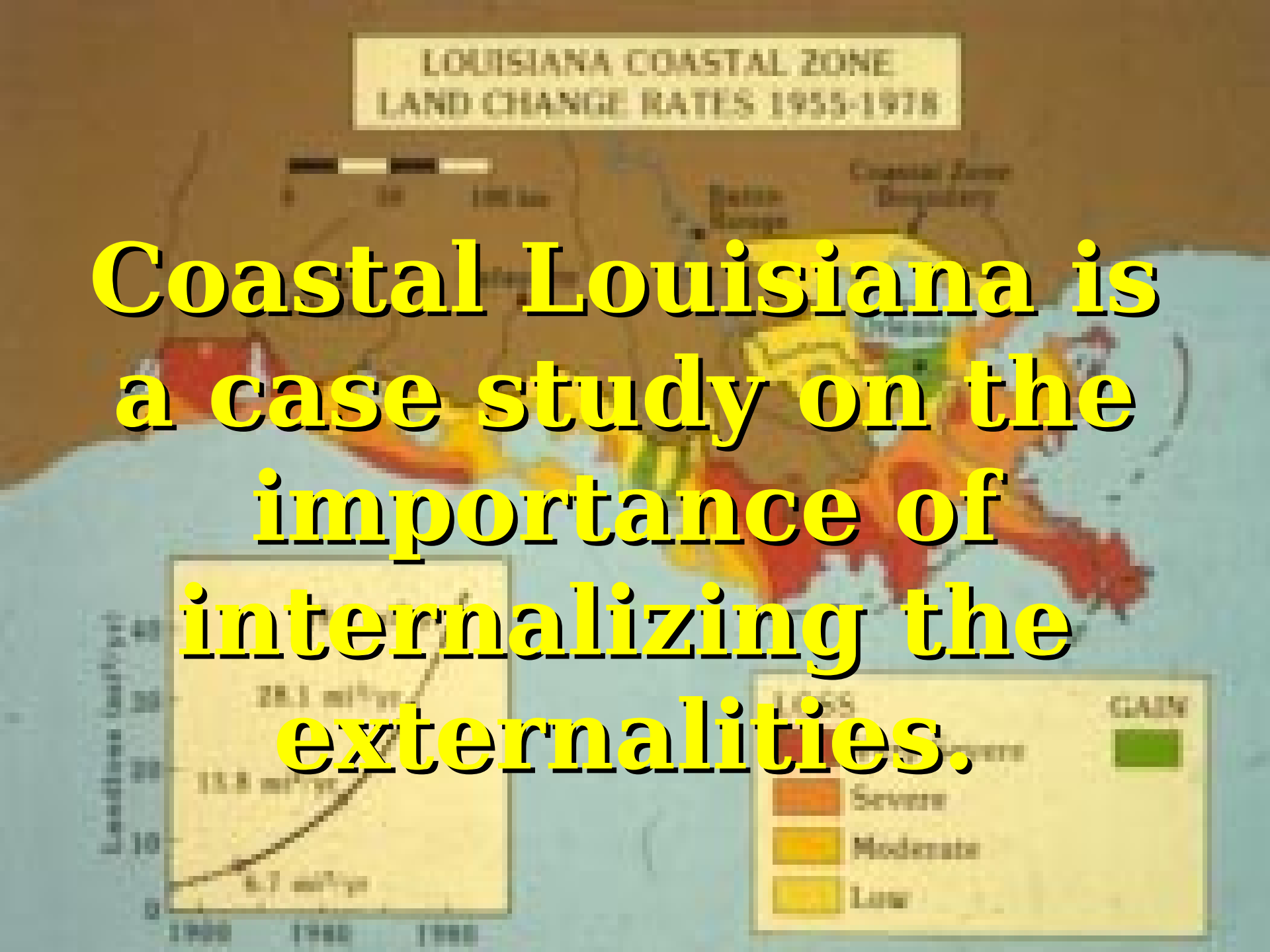


Hand-Tonguing Oyster

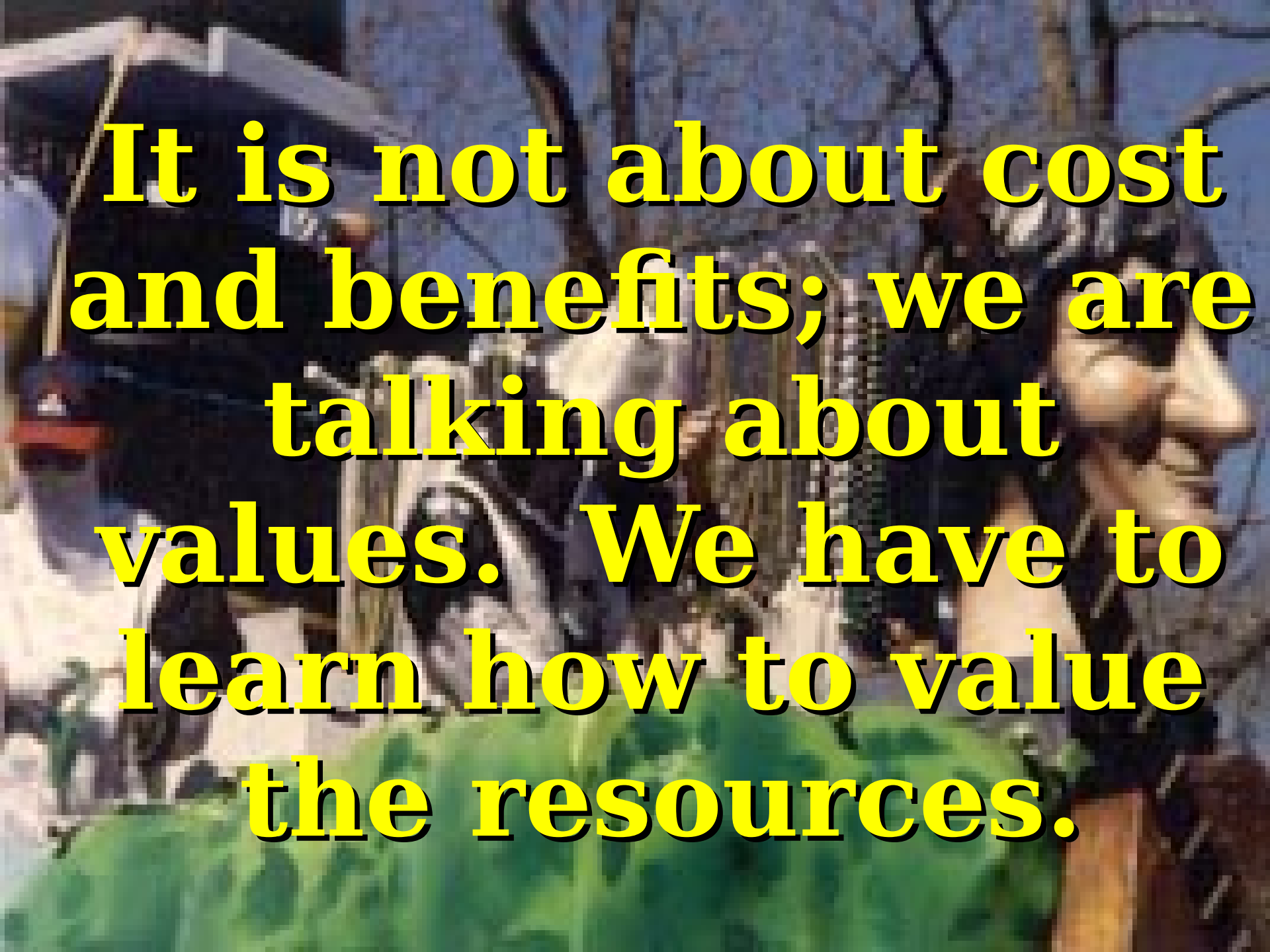


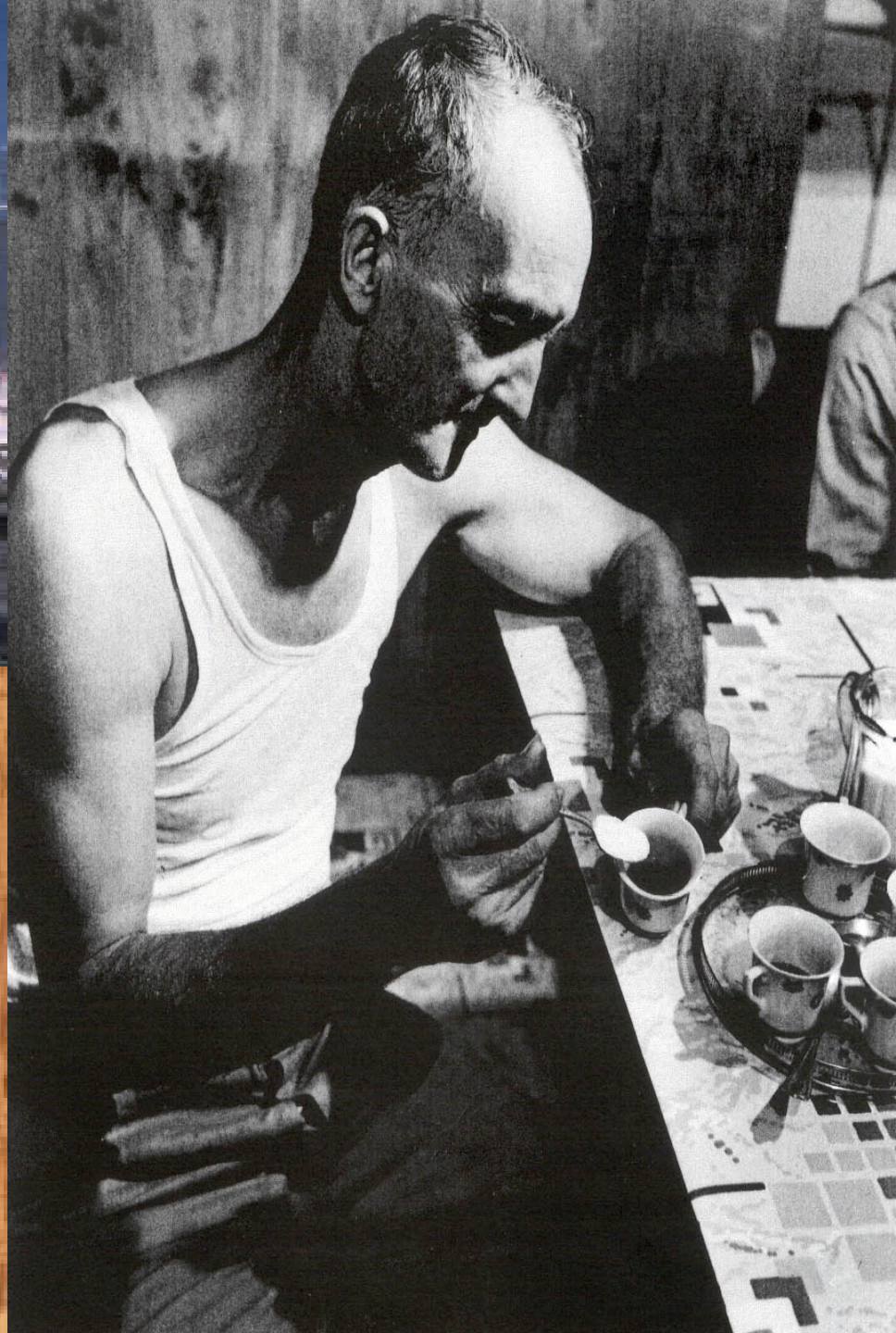
Ditches, or *trainasse*, - large enough for a *pirogue* were cut to gain marsh access.

Alligator meat has become a gourmet item - Man Eating Alligator!!



Coastal Louisiana is a case study on the importance of internalizing the externalities.


It is not about cost and benefits; we are talking about values. We have to learn how to value the resources.



Does the cultural heritage of the local population

This is a South Louisian a ATM machine!!!